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# REGISTER OF PENNSYLVANIA,

DEVOTED TO THE

PRESERVATION OF FACTS AND DOCUMENTS,

AND EVERY KIND OF

USEFUL INFORMATION

RESPECTING THE STATE OF PENNSYLVANIA.

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EDITED BY SAMUEL HAZARD.

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VOL. XV.—FROM JANUARY 1835 TO JULY 1835.

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Philadelphia.

PRINTED BY WM. F. GEDDES—9 LIBRARY STREET.

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# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.—NO. 1. PHILADELPHIA, JANUARY 3, 1835. NO. 365.

## RIVER DELAWARE.

Report of the Commissioners appointed on the part of the State of Pennsylvania, under a resolution of the Legislature relative to the use of the waters of the River Delaware.—Read in the House of Representatives, December 12, 1834.

*To the Senate and House of Representatives of the Commonwealth of Pennsylvania.*

Gentlemen.—I herewith transmit the report of the commissioners on the part of the State of Pennsylvania, under certain resolutions of the Legislature, "relative to the use of the waters of the Delaware," together with the agreement executed by them in conjunction with the commissioners appointed on the part of the State of New Jersey, in relation to that subject, and accompanying documents, and to which I respectfully invite the immediate attention of the General Assembly.

GEO. WOLF.

Harrisburg, December 12th, 1834.

TO GEORGE WOLF,

Governor of the Commonwealth of Pennsylvania:

The under-signed commissioners appointed in obedience to two resolutions of the Legislature of Pennsylvania, "relative to the use of the waters of the Delaware," approved the 10th April, 1832, and the 8th February, 1833, respectfully report:

That on the 22d November last, they executed an agreement with Garet D. Wall, John M. Sherrerd, and Peter J. Stryker, Esquires, commissioners appointed by virtue of similar resolutions of the Legislature of New Jersey, which is herewith transmitted. Should this agreement meet the approbation of the Legislatures of both States, the controversy which has heretofore existed between them, in regard to the use of the waters of the Delaware, will be finally, and, they believe, happily adjusted.

It would be useless to detail all the proceedings of the joint commissioners, which brought them to the final result: The undersigned will, therefore, confine themselves to a brief exposition of the reasons why they entered into such an arrangement, and then leave it to the wisdom of the Legislatures of the respective States for their adoption or rejection.

When they visited the Delaware, in September last, they found that the Delaware and Raritan canal company, were enjoying the use of the waters of the river, for the purpose of supplying their canal, by means of a feeder at the head of Bull's Island. The Canal Commissioners of Pennsylvania, had also erected temporary but very inadequate works at Wells' Falls, by means of which, the Delaware division of the Pennsylvania canal below New Hope was partially supplied with water.—These works had, on both sides, been constructed in violation of the spirit of the compact of 1783, between the two States, "for the purpose of settling the jurisdiction of the river Delaware." What then was to be done? It could not be supposed that either State would abandon the use of her canals for want of water, whilst the river was flowing past them. The true policy, then, was to grant to each as much and only as much water as might be necessary to supply her canals, but under

such restrictions that the least possible injury might be done to the navigation of the river. The right to the free use of the stream belonged to the citizens of both States long before these canals were projected. Those most interested in its enjoyment, are a hardy and industrious race of watermen, who have made "the running of the river" the business of their lives. Any agreement which should fail to secure their rights, would not and ought not to be sanctioned by either State.

A great error was committed in the location of the Pennsylvania canal, by not making its bottom level two feet lower. Had this been done, it might have been supplied with water from the river, through the feeder, without the aid of a dam. This mistake was not discovered until it was too late to be corrected without great expense and trouble, and without abandoning the use of the whole canal, until the section immediately below New Hope could be excavated to the proper level. It then became proper to obtain the consent of New Jersey to the erection of such a dam as would, at all times, supply the Pennsylvania canal with water, and thus place it on an equal footing with the Delaware and Raritan canal, which, by means of the admirable position of this feeder, abstracts the water from the river without any dam.

The agreement secures to Pennsylvania the right of constructing a dam at Wells' Falls, not exceeding three feet in height above the surface of low water at the head of the Falls, with a sluice sixty feet wide. In the opinion of Mr. Goy, the engineer employed by the Pennsylvania commissioners, such a dam of two feet in height, would be sufficient to answer the purpose. In making a permanent provision, however, it was thought best to insert three feet, and thus avoid all difficulties which might occur in time to come. This was deemed the more proper, as Mr. Douglas, the engineer of the New Jersey commissioners, is of opinion that a higher dam than two feet would be required. It is strongly recommended that this dam shall be raised no higher than may be absolutely necessary.

In considering the provisions made to secure and facilitate the river navigation, it will be necessary to view them both as regards the descending and the ascending trade. And first in regard to the descending trade:

Wells' Falls have presented more difficulties to watermen than any other portion of the river between Easton and tide. Indeed they have, at this place, been obliged to employ pilots at considerable expense; and even then, their craft have often been cast away. The channel, for about one hundred and fifty feet below the contemplated dam, passes between two ledges of rocks, each terminated by large and high rocks between fifty and sixty feet apart. If this channel be missed, the descending raft or boat is made a wreck, unless when the water is very high. The proposed sluice will be a perfect security against this danger, and will render the employment of pilots unnecessary. According to the language of the agreement, its walls must be made of substantial timber crib work, filled with stones, and the upper ends thereof, extending into the dam, shall be made sufficiently high to afford an index to watermen of the channel prepared for them. It must be "at least three hundred feet long, or longer if necessary, to make

a secure descending navigation." The descending craft will thus be safely passed through these ledges of rocks which constitute the greatest danger in the Falls, with the increased depth of water which will be forced into the channel by the dam. Indeed, judging from the opinions of the engineers, as well as those of experienced watermen, a similar dam and sluice ought to have been constructed, merely to improve the descending navigation of the river, without any reference to the supply of the Pennsylvania canal with water. The experience which we have had of the effects of dams and sluices on our other rivers, proves that such works as those proposed ought not to alarm the fears of the most timid. That they will be executed in good faith, according to the terms of the agreement, should it be sanctioned, cannot for a moment be doubted.

Next in regard to the ascending river trade. This is now conducted by what are called Durham boats.—These are falling gradually into disuse, and it is probable that they will disappear in the course of a few years. The whole ascending trade, from the nature of things, must ere long pass through the canals on either side of the river. Whilst any citizen, however, desires to use the natural stream for this purpose, his right to do so is unquestionable. The proposed agreement provides for such persons a much better and more secure navigation than they have ever enjoyed. It takes their boats into the Pennsylvania canal below the Falls, by two wooden locks at the mouth of Neely's creek, and passes them out into the dam above the Falls through the guard lock; and this free of toll. The most difficult and dangerous navigation of the whole river is thus avoided.

The cost of these improvements, according to the estimate of Mr. Gay, will amount to \$27,000.

Whilst this arrangement secures both the ascending and descending trade of the river, it provides the means, without any additional expense, of a communication between the Pennsylvania and the Delaware and Raritan canal. The guard lock necessary at the head of our feeder, and the deep water which will be created across the river by the dam, will, should the Delaware and Raritan company lock down into it from their feeder, make this communication complete. Although the agreement does not stipulate that this shall be done, and both parties are at perfect liberty to act as they think proper, yet the public interest and convenience must soon accomplish this purpose. Indeed we have good reason to believe that the Canal Commissioners have it already in serious contemplation.

There is no place on the river where this communication can be conveniently effected, with a due regard to the interests of Pennsylvania, except at Wells' Falls. It is natural for the Delaware and Raritan canal company to prefer that it should be made at Black's Eddy, which is but a very short distance above the head of their feeder. But the consequence would be, that Pennsylvania must lose a large portion of toll upon her canal, between Black's Eddy and New Hope, a distance of about ten miles, without any corresponding advantages to the public. For whether a boat passes out of one canal into the other, at Black's Eddy, or at New Hope, can make no material difference except to those who receive the tolls.

From this connection at New Hope, the Delaware and Raritan canal company must, notwithstanding, derive important advantages. It would be difficult to form any estimate of the quantity of coal from the Lehigh which must thus be drawn into their canal for the purpose of seeking a market at New York. Suffice it to say, that it would be a fruitful and annually increasing source of revenue.

That portion of New Jersey along the route of the canal is greatly in need of lime, and the country around New Hope, in Pennsylvania, can supply this want to any extent which may be required. Indeed it is highly probable that this article may be sent in large quanti-

ties through the same channel to the city of New York. Besides, the feeder was originally destined merely to supply the canal with water, and not to become a source of profit to the company. By the proposed connection, however, that part of it between Lamberts-ville (opposite to New Hope) and Trenton, will become in itself an important and profitable canal.

A connection at this point will furnish to the people of both States, along the Delaware, the benefits of the rival markets of New York and Philadelphia; and being made as near to the latter city as practicable, will yield no undue advantages to the former.

Had the views of the Commissioners been limited to the best mode of supplying the canal below New Hope with water, they might probably have recommended a dam and feeder at Cutbush's Island. But when they consider this subject as essentially connected with a communication between the two canals, they have no hesitation in recommending Wells' Falls as the place from whence Pennsylvania ought to take the water for this purpose.

The whole of this branch of the question has been so clearly elucidated in a paper presented to the Commissioners by Mr. Ingham, who resides near the spot, and possesses both a general and local knowledge of the subject, that they take the liberty of transmitting it with their report.

From the report of Mr. Kneass, the engineer formerly employed by Mr. Sergeant, under the direction of the board, it appears that at the time he made his examinations, a serious obstruction to the navigation of the river existed at Scudder's Falls, which had been placed there by the Trenton Delaware Falls company. In October last, when the Commissioners of both States met at Trenton, they went upon the ground, and found that it had been so far removed as no longer to present any very serious impediment. The company have since adopted a resolution pledging themselves that there shall not in future be any cause of complaint; and the State of New Jersey has, by the agreement, undertaken, that this obstruction shall be removed or otherwise obviated.

The undersigned Commissioners herewith transmit the report of Mr. Kneass, of the 2d April, 1834, together with his drawings of the river from Easton to tide; the copy of a letter of instructions addressed to Mr. Gay on the 17th October last, with his report of the 27th of the same month; a copy of the report of Mr. Douglas to the New Jersey Commissioners; and the paper submitted by Mr. Ingham to the Pennsylvania Commissioners, at New Hope, on the 27th September last.

In conclusion, the undersigned embrace this occasion publicly to express their sense of the liberal, frank and friendly disposition manifested by the New Jersey Commissioners, throughout the whole of the proceedings.

With sentiments of the highest consideration,

We remain truly yours,

JAMES BUCHANAN,  
JOSEPH BURKE,  
ROBERTS VAUX.

December 1834.

#### — AGREEMENT

Between the Commissioners of the States of New Jersey and Pennsylvania, relative to the use of the waters of the river Delaware.

An Agreement made and concluded between James Buchanan, Joseph Burke, and Roberts Vaux, Commissioners appointed by virtue of certain resolutions of the Legislature of Pennsylvania; and Garret D. Wall, John M. Sherrerd, and Peter J. Stryker, Commissioners appointed by virtue of similar resolutions of the Legislature of New Jersey:

First. It is declared that the State of New Jersey may take, or cause to be taken, from the Delaware river, by means of the feeder at the head of Bull's Island,

as much water as may be necessary to supply the Delaware and Raritan canal for the purposes of navigation.

Second. It is declared that the State of Pennsylvania may take, or cause to be taken from the Delaware river, by means of dams and feeders at Wells' Falls, as much water as may be necessary to supply the Delaware division of the Pennsylvania canal, as far as the city of Philadelphia, should the canal be so far extended, for the purposes of navigation. The height of the dam to be constructed by the State of Pennsylvania at Wells' Falls, shall not exceed three feet above the surface of low water at the head of the Falls. There shall be a sluice in the dam sixty feet wide, and at least three hundred feet long, or longer if necessary to make a secure descending navigation. The walls of the sluice as well as the dam shall be made of substantial timber crib-work, filled with stones, and the upper end of the sluice walls extending into the dam shall be made sufficiently high to afford an index to watermen of the channel prepared for them. Boats or other craft ascending the river shall be admitted into the Pennsylvania canal, by locks constructed at or near the mouth of Neily's creek; and the said boats or other craft ascending the river shall be let out into the river by a guard lock or lift locks at the head of the Falls, free of expense. The locks shall be of sufficient capacity to admit all boats or other craft which can navigate the Pennsylvania canal. A good and sufficient channel shall be kept open above the dam, of sufficient depth at low water to float said ascending boats or other craft which may pass from the said canal, to a corresponding depth of water in the river, and above the suction of the said sluice, and such a tow path as may be necessary for this purpose shall be constructed. Such locks, channel and tow path shall, at all times, be kept in good repair by the State of Pennsylvania.

Third. The State of New Jersey shall cause the obstructions to the navigation of the river Delaware, at Scudder's Falls, which have been placed there by the Trenton Delaware Falls company, to be removed or otherwise obviated.

Fourth. Nothing herein contained shall be construed to impair or alter the contract made between the States of Pennsylvania and New Jersey on the twenty-sixth day of April, one thousand seven hundred and thirty-three, except so far as the same is herein declared.

Fifth. This Agreement shall be considered as a joint compact between the said States, and the citizens thereof respectively, whenever the Legislatures of the said States shall severally have passed laws, approving of and ratifying the same, and shall thereafter forever be irrevocable by either of the said contracting parties, without the concurrence of the other.

In witness whereof, we, the Commissioners of the aforesaid States, have set our hands and seals to two instruments of the Agreement, one for each State, at the city of Philadelphia, this twenty-second day of November, one thousand eight hundred and thirty four.

JAMES BUCHANAN,  
JOSEPH BURKE,  
ROBERTS VAUX,  
GARRET D. WALL,  
JOHN M. SHERRERD,  
P. J. STRYKER.

#### COPY OF A LETTER

Of Instructions addressed to Edward F. Gay, Esq.

LANCASTER, 17th October, 1834.

Dear Sir:—Mr. Kneass, the former engineer of the Commissioners, having made no report concerning the practicability of supplying the Pennsylvania canal with water from Wells' Falls; you are hereby requested to make an examination of that portion of the river, with

this view. Should you find it practicable, you will report to the Commissioners the best mode of supplying the canal from this point, with the least possible injury to the navigation of the river. Please to be particular in stating the height of the dam which may be necessary for this purpose, and describing it in other essential particulars. You will, also, direct your attention to the best mode of counteracting the impediments which such a dam may interpose to the ascending and descending trade by the natural channel.

Might not the navigation of the river be completely secured by the construction of an outlet lock above and another below the falls? And in case it should be deemed expedient to establish a communication between the Delaware and Raritan canal and the Pennsylvania canal, at this point, would not the upper lock serve, both to pass the river trade, and effect such a communication?

We should be pleased to have an estimate of the expense of all these works.

Does the Lehigh, in your opinion, afford sufficient water, at all seasons, to supply the canal from Easton to New Hope?

You are, likewise, requested to examine the obstruction which has been erected at Scudder's Falls by the Trenton Delaware Falls company, and inform us, whether there is, in your judgment, any mode of restoring the navigation, except by entirely removing the nuisance.

There is good reason to believe that, within the last few weeks, the Delaware and Raritan canal company have caused their feeder, at Bull's Island, to be deepened a foot or more. If this be true, what will be the effect upon the navigation of the river?

The joint commission will meet at Trenton, on Tuesday the 29th instant: at which time it is expected that your report will be prepared.

By order of the Board of Pennsylvania Commissioners.

JAMES BUCHANAN, Chairman.

EDWARD E. GAY, Esq. Engineer.

#### MR. GAY'S REPORT.

LANCASTER, Oct. 27th, 1834.

To the Hon. JAMES BUCHANAN,

Chairman of Board of Pennsylvania Commissioners.

Sir:—In conformity with your instructions of the 17th inst., I have made such examinations as were deemed necessary, to ascertain the practicability of supplying the Pennsylvania canal with water, at *Wells' Falls*, on the Delaware river. The result of which is an assurance, that it is *practicable* to supply the canal at that place.

As my limited time will not allow me to enter into a general description of the river at *Wells' Falls*, I will therefore proceed immediately to describe the mode which appears to me best calculated to obtain the desired supply, without injury to the navigation of the river.

The present dam at the *Falls* as constructed by the State of Pennsylvania, extends up stream from its connection with the western shore, at an angle of about twenty degrees deflection from it. It is proposed to extend this dam two hundred and sixteen feet further up the stream, thence at a right angle with the course of the river, to connect the dam with the Eastern, or Jersey shore, leaving a sluice of sixty feet wide in the centre or main channel of the river, for the passage of arks, rafts, or other craft, descending the same.

The height of the dam contemplated, is *two feet above the surface of low water mark at the head of the Falls*, and its length *exclusive* of the old dam will be eight hundred (800) feet.

The sluice is designed to be three hundred feet long, extending parallel with the stream one hundred and fifty feet above, and the same distance below the dam, both the sluice and dam, should be formed of substantial

timber crib work, filled with stone, and the upper ends of the sluice walls be made sufficiently high, as always to afford a sure index to the *watermen* of the channel prepared for them. The length of the sluice walls proposed, is such, as is calculated to reduce the fall to an angle, sufficiently small to admit the descending trade always to pass through with ease and safety.

The obstacles which nature has interposed at this place, as a barrier to a safe navigation, are such as induces me to believe that I hazard nothing in expressing my opinion, that the dam and sluice proposed, will, if properly constructed, instead of injuring, be a decided improvement to the descending navigation of the Falls.

The sluice will, by concentrating a much larger portion of water than has heretofore flowed in the natural boat channel, enable persons who are at all accustomed to the river, to pass these falls without the aid of a *Pilot*, which is now considered necessary. Indeed, if the proposed dam and sluice should be constructed, it will be effecting a valuable improvement to the river navigation at this important point, which the united efforts of Pennsylvania and New Jersey should have accomplished several years ago without reference to its utility as a canal feeder.

In order to secure to the people, the advantage of an ascending navigation, it is proposed to connect the canal with the river by a set of combined locks of seventeen feet lift, at or near the mouth of Neely's creek, about one mile below the proposed dam, which will enable the river craft to pass into the canal, from whence they can again be returned to the river by the means of an inlet or guard lock which can be constructed to answer the treble purpose of feeding the canal, of passing the ascending trade, and (if locks are constructed on the Jersey side of the river,) of affording a safe and easy connection with the Raritan and Delaware canal, at, or near Lambertsville.

The Lehigh river has, during the past season, afforded an ample supply of water for the canal from Easton to Newhope, and I am of opinion that it *will always* be capable of doing so. The time however may come, when a more active trade than that of the past season, will show the propriety of introducing a feeder to the canal, at some point on the Delaware, above Newhope.

My examination of the obstruction which has been erected by the Trenton water company, in the river at Scudders' Falls, enables me to say, that the *navigation* at that place cannot be perfectly restored, except by the removal of the mound which now occupies the original boat channel. It may however be considerably improved by the removal of the gravel bar, deposited near the head of the mound, and by the erection of a wing dam from the outside of the present channel to the western shore of the river, which will by accumulating a greater body of water in the channel lessen the present liability of boats to *ground*—impediments however, will always be likely to accumulate at this point, and render the passage of boats difficult, in consequence of the abrupt termination of the mound, which presents a check to the current at high water, and thereby forms an eddy, the natural consequence of which, is a deposit of sand or gravel in its immediate vicinity.

In reference to your inquiry as to the effect upon the navigation of the river, by deepening the head of the feeder to the Raritan and Delaware at Bulls' Island, I am not prepared to give a satisfactory answer. On a visit to the point in question, it appeared that the works contemplated by the company at the entrance of the feeder were incomplete. The arrangement however, is one which is calculated to place at the command of the company, a large portion of the river during its lowest stages—and should the water be drawn through the feeder, for any other than navigable purposes, it would in all probability tend to injure the natural navigation of the river during low water.

It may be proper to remark before closing this report, that the eastern end of the proposed dam at Wells' Falls, would terminate on a mound of solid rock, which forms the bank of a Raceway belonging to the Raritan and Delaware canal company, and that by the construction of the dam, the water privilege at that place will be materially enhanced in value.

In the hope that you will excuse this brief and hasty report, consequent upon the limited time allowed me, from other engagements, to prepare it, as well as to make the examination.

I remain,

Very respectfully,

Your obedient servant,

EDWARD F. GAY, *Engineer*.

The estimated cost of the works proposed at Wells' Falls, is as follows:

Dam and sluice walls,	\$12,600
Inlet or guard lock,	5,500
Outlet locks, (of wood,)	8,900
<b>Total,</b>	<b>\$27,000</b>

E. F. GAY, *Engineer*.

TO JOHN SERGEANT, Esquire, of Philadelphia, JOSEPH BERKE, Esquire, of Easton, and WALTER S. FRANKLIN, Esquire, of Harrisburg, Pennsylvania, Commissioners appointed by his Excellency the Governor, for certain purposes detailed in the law approved the 10th of April, 1832, and in a supplemental resolution passed by the Legislature of the Commonwealth, 8th February, 1833.

Gentlemen:—In pursuance of the commission above named, to employ a competent and disinterested engineer to ascertain the most practical and economical manner of supplying the Delaware division of the Pennsylvania canal with water, at or near Wells' Falls on the river Delaware, and from that place to the next lock below, and to furnish such plans, specifications and estimates as may be deemed necessary for that purpose; and of the supplemental resolution, authorizing said Commissioners, by their engineer, to ascertain how the obstructions in the river Delaware may be obviated, having a due regard to the safe and convenient navigation of the river, and the use of the waters thereof, for actual or contemplated improvements, without injury to the said navigation; and of a note of instructions from John Sergeant, Esquire, authorizing the engineer to extend his examinations above Easton, should he deem it necessary to enable him the better to report in detail to said commissioners upon the points which he is inquiring:—The undersigned, having a due sense of the duties which the law and the resolution have required, and which are given him in charge by the Commissioners, has the honor of laying before you the result of his researches and observations on these interesting subjects.

General considerations connected with the subject, as well as information obtained from competent authority in the neighborhood, sustained by the opinion of one of your body, determined the proper point for the commencement of the inquiry to be at the junction of the Lehigh and the Delaware. Easton was therefore chosen as the point of commencement for the investigations.

From Easton to Bull's Island, a distance of about thirty miles, there is no serious impediment to the navigation of the river. Its natural course is obstructed by shoals and rocks, still preserving a channel which the experienced waterman readily finds, and in the spring of the year, when high waters generally prevail, the difficulties are entirely overcome, and a navigation is presented free from danger.

A prominent feature in this portion of the river, is Warford or Tumble Falls. The river at this point, has



a mean width of nearly one thousand feet, and falls at the rate of 9.36 feet per mile, passing over rocky bottom; the channel is nearly straight and is easily navigated; nor is the ascending navigation as difficult here as frequently occurs on rivers where the fall is less, owing to the counter currents which exist along the Jersey shore, occasioned by the peculiar course of the river above the head of the falls.

This point is recommended strongly as the site for a feeder for the Delaware division of the Pennsylvania canal, which may be effected without injury to the navigation of the river, by extending a dam from the main land to the foot of Cut-bush Island, and connecting the other Islands, which continue to the head of the falls, by similar works.

Between the site on the Pennsylvania side of the river, where I have recommended the location of a feeder for the Delaware division of the Pennsylvania canal, and a point on the same shore nearly opposite the head of Bull's Island, it has been suggested that an outlet lock should be made, by which the trade of the Pennsylvania canal might be drawn off towards the city of New York, *via*, the feeder and the Delaware and Raritan canal. In reference to the practicability of such a purpose, I have examined the circumstances, and find the depth of water, at the lowest stage of the river, highly favorable, with other facilities near the spot, to such a scheme, and can be effected without injury to the navigation of the river.

The next point of consideration, is at *Bull's Island*, where the State of New Jersey has authorized important works for the benefit of the Delaware and Raritan canal company, of which, a particular notice should be taken in this report as intimately touching the spirit and letter of instructions under which the undersigned is inquiring, to wit: "to have a due regard to the safe and convenient navigation of the river." At this point, water is to be abstracted from the river, to supply the trade of the above canal, by a feeder twenty-two and a half miles in length, the water line of which is sixty feet, bottom width thirty-six feet, depth six feet, and a descent of two inches per mile, with one lock of ten feet lift. The mean velocity of such a feeder is 10.5 inches per second, which, multiplied by the area, gives 252 feet per second. This feeder joins the summit level of the main canal near the city of Trenton.

The main canal, from the point of entering the Delaware river at Bordentown, to where it enters the Raritan river, near New Brunswick, is about forty-four miles in length, with a water line of seventy-five feet in width and seven feet in depth, bottom width forty-seven feet, and is said to be so constructed as to allow of increasing the water line to eighty feet, and the depth to eight feet. It descends from the summit level to the Delaware at Bordentown, by seven locks of eight feet lift each, and into the Raritan near New Brunswick, by a like number. The locks are twenty four feet in width, and one hundred feet in length in the chamber.

The greater quantity of water necessary to sustain the maximum trade of this canal and feeder, must be taken from the Delaware river at the head of Bull's Island; what effect the abstraction of such a quantity of water would have on the navigation of the river, it is impossible to ascertain with accuracy, owing to the uncertainty of the data connected with such an inquiry; for it is a fact well established, that in no instance has practice ever confirmed the theoretical principles given by those who have considered the subject of supplying canals with water, when evaporation, filtration, and leakage, are items in the calculation. Therefore, as these and other circumstances are unknown, the undersigned is constrained to decline declaring what would be the actual result, where such vital interests are concerned.—He has, however, involved all the data which were within his reach, and tested them with formula applicable in such cases, and the results have been that the river was adequate to the supply, without injury to the

navigation of the river; but the undersigned has no confidence in results derived from the involvement of uncertain data, he therefore refers the decision of the important question to practice, the sovereign arbiter on this occasion.

From Bull's Island no obstructions are met with, in a distance of seven miles.

That portion of the river near New Hope, called *Well's Falls*, is perhaps the most difficult and dangerous part of the navigation; the descent in one mile is nearly thirteen feet—the water rushes impetuously over and among rocks and shoals, and the channel assumes so irregular and tortuous a course that there is much uncertainty in the navigation, and occasional losses of property, even by skillful navigators. This place has frequently been the subject of consideration, with a view of obviating the difficulties so justly complained of; the plan proposed has been, in every instance, to form a new channel, by removing the rocks, but has never been completed; a perseverance in the same scheme is recommended as cheaper and more effective than any other in obviating the difficulties, as far as the *rafting trade* is interested. Also, that the wing dams and machinery be removed which have been erected by the state of Pennsylvania, for the purpose of supplying the Delaware division of her canals with water. To facilitate the ascending and descending *boat trade* of the river, at this point, I recommend that outlet locks be constructed at the head and at the foot of the falls, and from the Pennsylvania Canal.

The next serious obstruction occurs at *Scudder's Falls*; the works erected at this place, by the authority of the State of New Jersey, have encroached upon the main channel to such an extent as seriously to intercept the navigation of the river. By the erection of a protection wall to the Trenton water works, more than one half of the river channel has been closed, and the remaining portion has been so far filled with deposit from the river, occasioned by counter currents produced by the erection of said wall, as to prevent in the ordinary state of the stream, the free passage of the river craft; with a full load, boats are necessarily obliged to be lightened, on arriving at this point, by transferring a part of their cargo to other vessels, at the expense of much time and labor, to enable them to proceed on their voyage.

The removal of all the works which have been erected by the Trenton water company, in this vicinity, is the only method of regaining the use of the old channel, and thus restoring to Pennsylvania the original and unalienated right to a free and undiminished navigation of the river; but the undersigned deemed it within his province to seek for an alternative to so extensive a sacrifice, and his examinations have led to the belief, that a new and efficient channel may be opened, by damming the inferior outlet, between Duer's and Slack's Islands, to four feet in height, and clearing a water course through the shoals which extend from Duer's to the main channel, at the foot of Slack's Island. As the necessity of this expedient has resulted from works authorized by the State of New Jersey, and the advantages of which accrue to her alone, she would appear bound to obviate the difficulties; and as they are of a very serious character, should be required to accomplish it without delay. Until this new channel be formed, it is recommended that the deposit be removed from the remaining portion of the old channel, as a means of relieving, in some degree, the suffering trade of the river.

From *Scudder's Falls* to tide water the river navigation has no obstructions; the wing dams which have been erected here from either side of the river have tended much to the improvement of the channel.

No report upon the navigable improvement of the Delaware would attain its end without some remarks insisting upon the propriety, nay necessity, of keeping that noble stream always open and unimpaired for the

transmission of produce, both up and down, throughout its original course. Although the undersigned will not attempt to controvert the opinion, somewhat enthusiastically expressed by a great projector, that rivers were intended to feed canals, yet it may be doubted whether the *dictum* be altogether true, more especially when referring to such extensive water courses as the Delaware. The wisdom which would drain its present bed for the purpose of supplying a lock navigation, however extended or perfect, might well be questioned by an indifferent observer, and would certainly engender discontent among a numerous portion of our fellow-citizens who rely upon it as the most direct and facile highway, to a market for their productions. A main staple of the upper country, watered by this stream and its tributaries, is of a description that will bear no other means of transportation to its customary market, than the open natural course heretofore always in use for that purpose, and on no consideration should the descending navigation be at all obstructed; should the time ever arrive when it would be necessary to resort to canal navigation for the transport of lumber from the interior, it is presumed that the transport of it to New York, through the Delaware and Hudson canal, would be so much more advantageous, than by the Delaware division of the Pennsylvania canal, as to deprive the State of Pennsylvania of almost the whole of that natural staple of her uncleared forests.

In estimating the importance of preserving the navigation of this stream unimpaired, it should be kept constantly in view that for several weeks in the spring it is available *earlier* than the canal, and continues open in the fall a still longer period; and these considerations should alone induce a reasonable degree of caution in advancing any project having a tendency to deteriorate its native powers of transportation.

In connection with the foregoing views relative to the navigation of the Delaware, the subject of supplying the Delaware division of the Pennsylvania canal with a sufficient quantity of water to sustain its maximum trade, has been carefully examined, and a suitable consideration given to its importance.

The scheme of reducing the level of that portion which extends from New Hope to the first lock below has the following reasons opposing such a measure. First, the time necessary to effect such a purpose is too long. Second, the delays to the trade on the canal would be too serious an inconvenience to the citizens, and loss of revenue to the State; and third, the canal would be incomplete, as far as a supply of water is concerned, as the deficiency which exists between New Hope and Black's eddy would not be provided for.

The required dimensions of the Delaware division of the Pennsylvania canal are, water line forty feet, depth five feet, bottom width twenty five feet; with lock chambers eleven feet by ninety-five feet!

From Easton to New Hope, the distance now supplied by the Lehigh, is thirty five miles, the average lift of the locks is 7.4 feet, nearly, and the maximum trade is assumed at one hundred and ninety-two boats in twenty-four hours, each boat requiring three-fourths of a lock full.

The estimate of the quantity of water requisite for lockage is based upon the following data. Theory determines that one lock full of water will carry a boat from the head of the canal to its termination; and that the return boat, if immediately following, will require one lock full at each lock: there being eighteen locks in the distance from Easton to New Hope, one boat would expend eighteen locks full to arrive at the head of the canal; this amount, added to the expenditure of water for the descending trade, is equal to nineteen locks full of water; a mean of which is 9.5 locks full of water for each boat passing the eighteen locks up and down; this mean allowance supposes that

the same number of boats should simultaneously arrive at the head and foot of each level. To compensate however for a deviation from this mode of arrivals, and for the variation in the lift of the locks, an addition of one fourth of a lock full is deemed sufficient, giving three-fourths of a lock full of water for each boat as the whole quantity expended by lockage.

The time expended in locking, upon the supposition that arrivals occur simultaneously at the head and foot of the lock, is estimated at eight boats per hour—this multiplied by the mean expense of water (three-fourths of a lock full) gives six locks full per hour as the maximum navigation. The prism of the lift of the locks between Easton and New Hope, contains seven thousand eight hundred and fifty cubic feet, three-fourths of which, or five thousand eight hundred and eighty-eight cubic feet, by the estimate above would be required for each boat, consequently the demand on the Lehigh would be  $192 \times 5,888 = 1,130,496$  cubic feet in twenty-four hours.

Evaporation is estimated at one cubic foot per minute on each one hundred thousand square feet.

Filtration is an item that depends on so many contingencies that it is difficult to arrive at its precise quantity. The amount of loss from this source on the New York canal, which has forty feet water line, and four feet depth, was rather exceeding one hundred cubic feet per mile, per minute, for the few first years after the introduction of the water; the banks however have become compact, and the bottom tighter, by puddling, consequently filtration considerably lessened. All new canals are subject to more or less loss by filtration, depending on the quality of the soil through which they pass and of which the banks are constructed; in process of time however these become more solid, and leakage on this account decreases. In the instance of the Delaware division of the Pennsylvania canal, which unfortunately passes through soil of so loose and porous a quality as to require a very long time to attain solidity, although the banks are becoming more solid from age and repairs, which are constantly going on, still we find the loss on this canal to amount to eight hundred and fifty-six cubic feet per mile, per minute, an amount much greater than has ever come within my observation. We have therefore for the item of filtration forty-three millions one hundred and forty-two thousand cubic feet as the loss in twenty-four hours.

While upon this subject I beg leave to remark, that all observations and experiments which have been made upon evaporation and filtration on canals, establishing principles for obtaining results to aid the engineer in his practical operations, have not enabled him to arrive at exactitude; the series of observations made under one set of circumstances cannot apply but where similar conditions exist, and that perhaps can never occur. Should the results be adopted which have been obtained from practice, with an allowance for the differences that exist, there never can be any other than an approximation to probability; for in no instance perhaps has practice ever but very remotely confirmed the theoretical principles which have been established by all authors upon Hydraulics, for ascertaining the supply of water for canals, when evaporation and filtration are items of consideration.

Leakage at locks is also an item that should enter into the calculation, and in this instance would be amply provided for at five hundred and fifty cubic feet per minute. The estimated amount of water required by the canal from Easton to New Hope in twenty-four hours will be as follows:

Lockage,	1,130,496
Evaporation,	106,560
Leakage and Locks,	792,000
Filtration,	43,142,400

45,171,456 or 31,369 cubic feet per minute.

The river Lehigh at its lowest stage of water at Easton passes into the canal through six valve gates two feet square, each, with a head of three feet six inches, and three culverts four feet square, each, eight feet in length, with a head of two feet six inches; from this data the quantity afforded in twenty-four hours is forty-four million nine hundred and ninety-two thousand five hundred and twelve, or thirty thousand six hundred and fifteen cubic feet per minute; the deficiency therefore is seven hundred and fifty-four cubic feet per minute, or one million eighty-five thousand seven hundred and sixty cubic feet in twenty-four hours. This amount of deficit is corroborated by the fact of there being but four feet water at New Hope, when the whole of the water of the Lehigh at its lowest stage passes into the canal, which is at the time the business of the canal is greatest. There is a small stream taken in as a feeder ten miles below Easton, but the quantity of water which it affords when a supply is most needed, is so small as not to be worthy of estimating.

It being ascertained both by theory and experience, that the Lehigh is insufficient to supply not only the maximum trade assumed for the canal, but even an approximation to it, the point at which a re-supply is required must be considered.

From Easton to the foot of lock No. 13, the distance is twenty-seven miles, the average lift of locks is 5.58 feet, nearly; the prism therefore contains five thousand seven hundred and seventy cubic feet; the amount due to lockage will be

$4,338 \times 192 = 830,976$ cubic ft. in 24 hours.	
Evaporation,	83,530
Filtration,	33,281,230
Leakage at locks,	792,000
	<hr/>
	34,987,776 or 24,297 cubic feet per minute.

Upon a comparison with the amount of water to be derived from the Lehigh with the quantity required for the trade upon the canal from the Lehigh at Easton to Black's eddy at the foot of lock No. 13, I perceive a surplus of six thousand three hundred and eighteen feet per minute, which would extend the trade of the canal a short distance further, but as Tumble falls is the only scite in the vicinity where a feeder can be economically and permanently constructed, it strongly recommends itself for that purpose; it was therefore deemed indispensable to ascertain the quantity of water that the canal will require from this point to Bristol, and the dimensions of the dam, and the minimum size of the feeder that will convey the amount of water supplied at the lowest condition of the waters of the river Delaware.

The circumstances of that portion of the canal from Black's eddy to New Hope are nearly the same as they are from Black's eddy to Easton; the estimates are consequently based upon the same data, while on the remaining portion of the line the item of filtration is less, because the soil through which it passes secures the banks and bottom a more speedy solidity.

From the foot of lock No. 13 to Bristol is thirty-three miles, with fifteen locks, the average lift of which is 7.12 feet, nearly, giving for cubic contents of the prism seven thousand five hundred and sixty cubic feet. The demand, therefore, for lockage, estimated as in previous calculations, will be

$5670 \times 192,$	1,088,640
Filtration, 856 cubic feet per mile per minute to New Hope, a distance of eight miles,	9,861,120
Filtration on the remaining distance, (twenty-five miles) at 142 feet per mile per minute,	5,112,000
Evaporation,	100,800
Leakage at locks,	792,000
	<hr/>
	16,954,560

Or eleven thousand seven hundred and seventy-four cubic feet per minute. The items of lockage and leakage are already partially estimated as supplied from the Lehigh: these, therefore, with the surplusage of six thousand three hundred and eighteen cubic feet, must be deducted, which will leave three thousand nine hundred and eighty-six cubic feet per minute to be taken in at Black's Eddy. And, to make ample allowance for contingencies, provision should be made in the construction of the feeder for one thousand cubic feet more, giving therefore such dimensions as will admit four thousand nine hundred and eighty-six cubic feet per minute being introduced.

A feeder may be constructed near Black's Eddy, which shall have at all times certainly a head of 4.25 feet, (above the guard gate,) measuring from the centre of the valve opening to the water line of the dam. To effect which, a dam must be built from the main shore, ten feet in height, to the foot of Cutbush Island; and the openings between Cutbush and Brag and Brag and Gondola Islands, be dammed to the level of the main dam; also that a wing dam be extended from the head of Gondola Island to the head of the falls, two feet in height at the island, and terminating on a level with low water mark at the head of Tumble Falls. Upon this plan we may safely calculate that the water in the dam will never be less than six inches above the water line of the canal at the foot of lock No. 13.

The minimum size of a feeder is ascertained to be 23.5 feet water line, sixteen feet bottom, five feet depth, and one and three-fourth miles in length, with three and a half inches fall per mile, which will deliver into the canal, in twenty-four hours, the quantity of water required through four valve openings, twenty-four inches square each.

In conclusion, I beg leave to remark that no fear need be apprehended of the navigation of the river being impaired by this improvement; for the canal requires a less quantity of water than now passes between the islands just mentioned and the Pennsylvania shore. That part of the river being dammed by this improvement, the surplus water would pass down the main channel on the east side of the river, by which its condition for navigable purposes would be improved. That under existing circumstances, it is impossible to keep in the canal, either at New-Hope or at Bristol, a greater depth than four feet; and if a break occur within ten miles of Easton, where it has most frequently occurred, the water is charged from the canal below the break, so as to stop the navigation in six hours. It requires from four to six days to repair the breach; and, when repaired, several days to fill the canal as far as New-Hope. The feeder now proposed would obviate these important difficulties, as it would be taken in at a point to which a supply of five feet of water could be obtained from Easton in twenty-four hours, leaving the residue of the loss to be made up in the same time by this feeder, which would be competent to such supply.

An estimate of the cost of the proposed feeder at Black's eddy; the map of the river from Easton to tide water; and the maps of head of the Delaware and Raritan canal feeder; the proposed feeder for the Pennsylvania canal; the maps of Well's falls and Scudder's falls, in detail are herewith presented.

In the fulfilment of the duties which you have been pleased to commit to his charge, the undersigned has endeavoured to avail himself of every information within his reach, and of all the data that appertain to an inquiry of so much importance. The difficulties which appear upon that portion of the Delaware division of the Pennsylvania canal to which your instructions have drawn the attention of the undersigned, could not have been foreseen by those under whose charge it was constructed, they being among those errors which are always, and unavoidably associated with the primary efforts of magnificent enterprises, and which ever have in their

practical operations, developments of difficulties, the correction of which always wait upon their appearance; therefore, any criticisms are invidious, supererogatory and unavailing. But as the duties of the undersigned have reference only to the means by which these difficulties can be obviated; he has accordingly directed his inquiries to the consideration of such plans as will secure the point of his instructions. In what he has suggested, he has had an eye to practicability as well as economy; he has been under the constant conviction of a general tendency to error in all human operation, and has accordingly felt more than ordinary solicitude in prosecuting his inquiries on this important subject, and enjoined on himself a caution and circumspection commensurate with the character of his appointment, he assures the authorities he has the honor of addressing, that although fully aware of high professional responsibility devolved upon him, and of the fallibility of all human calculations he feels not the more reluctance, or less confidence in submitting the result of his labors.

Respectfully submitted,

SAM'L H. KNEASS,  
Civil Engineer.

#### *Estimated cost of the Feeder at Bluck's Eddy.*

For the Delaware Division of the Pennsylvania canal—Dam at Cutbush Island.

400 Feet long, 12 feet high, at 9 dollars per foot,	\$3,600 00
500 Perches of masonry at 5 dollars per perch,	2,500 00
1,800 Cubic yards of gravel at 30 cents per yard,	540 00
38,128 Cubic yards of excavation at 12 cents per yard,	4,575 36
38,128 Cubic yards of embankment at 18 cents per yard,	6,863 04
18,992 Cubic yards of excavation at 25 cents per yard,	4,748 00
2,000 Perches slope wall at 1 dollar per perch,	2,000 00
Aqueduct at Tobicon,	2,000 00
Guard gate complete,	1,500 00
	<hr/>
	28,326 40
Add 15 per cent. for contingencies and superintendence,	4,249 00
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Whole cost of feeder,	\$32,575 40

SAM'L H. KNEASS,  
Civil Engineer.

Philadelphia, 2d April, 1834.

(To be continued.)

#### REPORT.

##### *Of the Committee on the Judiciary System.*

The Committee on the Judiciary System, to whom was referred the petition of sundry citizens of Bucks County, praying for the passage of a law commuting the punishment of Joseph Blundin, lately convicted of murder in the first degree, and now under sentence of death—Report,

That they have given the subject all that grave consideration, which the short time allowed to them would permit; and have come to the conclusion that the Legislature has or has not the constitutional power to pass such a law as that prayed for, it may not be improper to suggest the reasons which the committee think render the power at least doubtful, and the exercise of

it inexpedient. The Legislature defines the crime and prescribes the punishment; the Judiciary administer the law by trial and judgment, and the executive is bound to execute the judgment, and therefore to the Executive is given by the constitution the power of extending mercy to the criminal by granting him "a pardon or reprieve." The extent of the power of each department is thus marked out by the constitution, and it is at least questionable, whether a law commuting the punishment of a convicted and sentenced offender would not be an arrogation of powers which belong properly to the Judiciary and Executive. It would be a reversal of the judgment of the court, and a new judicial sentence by Legislative enactment. It may be further remarked, that, although we have been exercising the powers conferred by the constitution for forty-four years, this is the first time that an attempt has been made to claim the interference of the Legislature in this way, and it may be fairly inferred that the general opinion of the people has been that no such power existed. Undoubtedly, the Legislature cannot by law either increase or diminish the power of the Executive on the subject of granting or refusing pardons, and any law passed could amount to little more than a recommendation of mercy. But, without entering into these questions further, the committee deem it highly inexpedient to make a precedent which will be calculated to cover their tables with applications for the interference of the Legislature in every case where a criminal or his friends may consider his sentence a hard one.—So easy is it, after the horror and consequent indignation of the public, at the commission of a great crime, has subsided to excite the sympathies of the humane and tender-hearted, that in a popular assembly the chance of escape from punishment would render the law no longer a terror to evil doers. So strongly was this found to be the case in the State of New York, that the power to pardon and commute punishments, which had been conferred on the Legislature, by the constitution of 1777, was taken from it by the convention of 1821; and this convention, in which were some of the ablest jurists in the Union, refused to give the power of commutation to the Governor. It is the certainty of punishment which furnishes the strongest protection of the community against the commission of crime. The lives and property of the people would be jeopardized by increasing the chance of escape of the wicked and profligate. If our criminal code is too severe, let it be altered; but till then let the law take its course. We all know that the life of no man will be taken away in Pennsylvania, if there is the slightest doubt of his guilt. He has every protection which the strongest feelings of humanity and the strongest prejudice against capital punishment can give him, that his life is safe unless his guilt is made clear and manifest, and when he is convicted, it may be truly said that "mercy to the criminal is cruelty to the state." He still, however, has his resort to the Executive, if there does remain or is afterwards discovered any circumstance which would render his punishment cruel, improper or unnecessary.

The Committee have not entered into an examination of the merits of the case submitted to them, nor would it be possible for them to do so. It has been tried by the proper tribunals. The Grand Jury, Petit Jury, and the court, have passed upon the crime of the offender after a full and careful investigation. He has been convicted by the Jury, a new trial refused by the court, and sentence of death pronounced upon him. There is no remedy for him except in the hands of the Executive. If even the right exists in the Legislature to interfere, the Committee are of opinion that such interference would be highly inexpedient, and lead to consequences deeply injurious to the best interests of society.

Therefore, Resolved, That the Committee be discharged from the further consideration of the subject.

## CASE OF JOSEPH BLUNDIN.

*House of Representatives.*

WEDNESDAY, Dec. 18, 1834.

The resolution appended to the report made by the committee on the Judiciary System, in the case of Joseph Blundin, being under consideration, Mr Harrison moved to amend it by striking out all after the word "Resolved," and inserting as follows:

"That the Committee be instructed to bring in a bill in accordance with the views expressed by the petitioner."

Mr. Harrison, said he introduced this amendment in accordance with the wishes of a large number of his constituents; men of the highest respectability who believed, and honestly believed what is set forth in their petition to the legislature, that at the time Joseph Blundin committed the act for which he has been sentenced to death, he was not in a sound state of mind. The unfortunate individual was born and brought up in his vicinity; he has a family consisting of a wife and several children, and a general feeling pervades that community, that he should become the object of legislative mercy. In addition to these wishes in behalf of Joseph Blundin, a general feeling was manifested in favour of the abolishment of capital punishment in all cases, and he was glad to perceive that the subject was likely to engage the attention of the House, and would probably be acted upon during the present session. If then, it is intended to pass a law during the present session, abolishing capital punishment, he could not see how any ill effects could arise from extending the benefits of such a law to the unfortunate person in whose behalf the petition reported was presented. That report did not deny absolutely the constitutionality of legislative action upon the subject, and he hoped that if it was not unconstitutional to pass a law of this kind, something might be done in compliance with the wishes of the petitioners.

After Mr. Harrison had concluded, Mr. W. B. Reed, rose.

Mr. Reed, (of the city) said that it had occurred to him when the memorials on which this report is founded, were presented by the gentleman from Bucks, that, let the decision of the committee be what it might, there would ultimately be presented a question of painful interest, for the decision of the House. He never supposed that any action of the committee would finally determine it. If the report were adverse to the prayer of the memorialist, the gentlemen whose constituents were so deeply interested in this subject, would not certainly acquiesce in it. It had resulted precisely as he anticipated, and every member who had reflected on it, must have realized the new responsibility, which the decision of such a question created. It was painful because it was new. Its effect was to give the members of this House a semi-judicial character which no one would willingly assume.—All this was the natural consequence of such applications. They may, and in this instance, did originate in the kindest and best of impulses, but it was mistaken kindness to nurse the hope of the adjudged criminal by expeditors of mercy—it was mistaken kindness that had sent their memorials here, and it would be the worst of policy for the house to entertain them. If the mercy seat is ever to be transferred hither, the Legislature will be incessantly, as it now is, wandering from its appropriate course of action and wildly assuming the powers and prerogatives of other departments of the government. Knowing as he did that this case of Blundin's did not stand alone but would be, if the application succeeds, the forerunner of others equally plausible, he was glad it had been brought early to the attention of the House, and hoped that the Legislature, adhering steadfastly to its own prescribed duties, would by its immediate action on this case, put all such applications at rest, now and forever.

He not only concurred fully and entirely in the views taken by the committee, but he went further, and while he asserted the palpable inexpediency of interfering here, he denied emphatically the constitutional power of the Legislature to grant the relief prayed for. It has no more right under the constitution to loosen the rope from this wretched man's throat, than it has to appoint the Judge who tried him. The prerogative of mercy is no part of our prerogative. It is lodged elsewhere, and it is lodged beyond our reach.

It will be said that this is not a prayer for special pardon and commutation, but for a general act, authorizing the Governor in all cases of capital conviction, to commute if he thinks proper. But it will not be pretended that this general enactment is not to apply to Blundin's case. The petitions are petitions for commutation, founded on the special circumstances of his case, and it is both in fact and in profession a petition for the special benefit of this individual, and nothing more. Now, were there no other objection, this would be a fatal one, and it was contrary to a common sense of right and wrong, to pass a retroactive law in a matter of criminal justice, by which an adjudged criminal who finds every legitimate avenue of escape shut against him; who has had his jury and his Judge, an honest tribunal and a merciful Executive to appeal to—who has pleaded his cause while it was matter of doubt, and since it has become matter of conviction, when he finds every appeal vain, comes to the power that made the law which he has confessedly violated, and asks that it may be repealed because he has broken it. No one Mr. R. said, would impute to him a wish to limit the proper power of remission, or to obstruct the access of this poor creature to the proper fountain of mercy. He would in all cases leave mercy to have full sway in the mind of him to whom the constitution has confided it. He had no doubt of its honest exercise, but where is the security that laws give us, if, when the moment of enforcing their sanction comes, they are to be repealed or altered, or modified, (for it is all the same.) It may be a bloody law that brings this prisoner to his doom, but it will be a far bloodier law that alters or annuls it now. It may be a bloody and a barbarous law, but *it is the law*. It is the law this prisoner is adjudged to have violated—it is the law which has hurried to a grave of infamy many a guilty man before him. It is the law which till repealed we believe to be our security—and, as the law, we ask that it may be sacred and inviolate.

Mr. Reed said he objected to a concession of this kind for another reason. The constitution has placed the pardoning power solely in the hands of the Executive. There is not the least reason to suppose that the Executive deems this a proper case for our special interference. If the facts set forth in the petition are true, Blundin is at least technically innocent, and though it was easy to believe that his total release might be a matter of regret, yet it would be an insult to the Executive to suppose that under such circumstances he would hesitate as to what was his duty. If the governor thinks this man innocent he will pardon him—if he doubts, he will reprieve him. But so far as this House knows, he neither disbelieves nor doubts; yet we, from whom the pardoning power is taken away, are called on to volunteer an interference and say to the Executive, though you and not we, have the power to pardon and remit—though the responsibility of pardoning the guilty or punishing the innocent is on you and not us, yet *we* will interfere and you shall neither execute nor dispense with the law—we the legislature will make, interpret and execute the laws at once.

Mr. Reed proceeded to argue in detail against the constitutional capacity of the Legislature to interpose. He confidently submitted to the candid consideration

of th's House, whether after trial and judgment, there is any other dispensing power known to the Constitution but the Governor's.—A law is made defining an offence and prescribing a penalty, there is an interpretation and a judgment, nothing remains but its execution according to the law; and whether that execution shall be enforced or not, is left expressly and exclusively to the Governor. Shall the Legislature come forward, and say, though the people authorized us to make penal laws, but gave us no authority to withhold their application to special cases as casual exceptions.—Though that is given to another—though Judges have interpreted and applied them—though the Executive is ready to enforce them, it shall at once be changed, and, though the prisoner has been convicted of murder in the first degree of which the punishment is death, we will try him anew so far as the sentence is concerned, and pardon him so far as his life is involved. This is a kind of judicial and executive legislation unknown to the constitution. Nor could it be enforced; for were such a law passed as is here prayed for, and Blundin were to be imprisoned for life, such a new penalty of legislative infliction could not be enforced for a single hour, and the guilty would escape by the aid of judicial process.

It is essential to keep the action of distinct constitutional powers apart. It is right to legislate for all rather than for one; to legislate, as the injunction of the constitution requires, not for the past but for the future. It was wholly unnecessary to refer to the merits of the case as stated in the petition, or to any peculiar claims on sympathy and commiseration. If this man had been unjustly condemned and should be unjustly punished, the blood of the innocent would not be on the legislature. He hoped that the amendment would not prevail, but that the resolution reported would be adopted and the committee discharged.

Mr. Lacock, agreed with the gentleman from Philadelphia, (Mr. Reed,) fully as to the inexpediency of interfering with the due administration of justice, but he did not agree with him in opinion that the legislature had not power to pass an act to save the condemned criminal from his doom. The constitution certainly gave them that power, and if they were disposed to exercise it, there were no obstacles interposed to prevent that exercise of it. There was no penal law upon the statute book which they had not a right to annul or repeal; and if they were to pass a law abolishing capital punishment entirely, including any persons who might have been reprieved by the Governor but not pardoned, that law would be a binding one, and, such individuals so reprieved, could not afterwards be executed. The passage of a law providing for the abolition of capital punishment, would deprive the Governor, entirely, of the power to execute, pardon or reprieve the criminal sentenced under laws which had a prior existence, and whilst it would take from the executive this power, it would also destroy the sentence of the court; and if either a general or special law were passed by the legislature which would go to abolish capital punishment, it would then become necessary to make provision for such as had been found guilty of offences under a former law. He believed that the legislature possessed such powers, and that they were strictly in accordance with the views of the legislature of 1794, by whom the penal code of Pennsylvania was revised and modified, and who, by an act passed at that session, gave those sentenced to death under former laws, a right to choose between the punishments inflicted by the old or the new laws. That the legislature possesses the power of commuting the punishment of death into any milder punishment they may regard as advisable, he did not doubt, and in his view, the power thus vested in the legislature, was shared equally by the executive who had the right to reprieve or pardon offenders; and that authority was es-

tablished upon the broad basis laid down by the constitution itself. But whilst he believed in the power of the legislature to interfere, not only in a general manner, but also in reference to this special case his opinion were equally clear and decided that it would be both improper and impolitic for the legislature to interfere, in this instance, with what had been done under the sanction of the existing laws. Upon this point his sentiments coincided entirely with those expressed in so able a manner by the gentleman from the city, (Mr. Reed,) and no remarks which he could make, could add force to the reasons already advanced by that gentleman against the desired interference. One thing more, however, struck him in relation to this matter, which he would state before he sat down, which was, that inasmuch as the people of Bucks county have asked for the commutation of the punishment of this individual, and would rather run the hazard of having him let loose upon society, than see him executed, the circumstance strongly enforces the necessity of a general law upon the subject. In his opinion, crime was increased by the severity of the punishment, and he rejoiced that the attention of the legislature was now likely to be engrossed by the question of the entire abolition of capital punishment, because it was one which called loudly for their consideration and action: And although he could not vote for the amendment of the gentleman from Bucks, (Mr. Harrison,) he did not dispute the right of the legislature to commute the punishment, and he hoped that a general law would be passed to do away capital punishment. He wished it to be expressly understood, from a long experience and careful observation of the penal laws, of this commonwealth, he was strongly desirous that this law of blood should be blotted from the statute book, and that a perpetual or limited imprisonment should be substituted.

The following resolution was then offered by Mr. Ayres, as an amendment:

"Resolved, That the committee on the judiciary be instructed to bring in a bill empowering the Governor or courts of justice to commute the sentence of death."

Mr. Ayres sustained his resolution at considerable length, and contended that as the government is divided into three branches, the Executive, Legislative and Judicial, and that each department had its proper limits, the action of the legislature in this case, would be an infringement upon the province of the judiciary. The House in his opinion, had no legal right to interfere to save the prisoner in whose behalf its interference has been asked, especially if the sentence designed to be ward off was passed in conformity with justice. To the executive belongs the power of a pardon or a reprieve, and if the facts of the case were not of such a nature as to justify the verdict of the jury, and the sentence which followed that verdict, the Executive could interpose, and save the criminal from the action of the law. At any rate, he did not doubt, that if the case was one which called for and would justify the interference of the Governor, that officer would suspend the operation of the sentence until the legislature had decided whether capital punishment ought to be abolished or not. He did not think that the carrying into effect of the law which required the blood of the criminal, was productive of any good effects; on the contrary, the place of execution too frequently became the theatre for the enactment of every species of vice and crime. To punish by imprisonment, and to make that punishment the certain doom of the offender, whilst it would be a more mild, would, he thought, be at the same time a more effectual preventative of the commission of crime; and according to his view, much good would arise to the community, from the passage of a law which would do away capital punishment altogether, and place in the hands of the executive, or the courts of justice, the power of commuting that punish-

ment for life, or for a limited term of years. Mr. Ayres made some further remarks, and was followed by

Mr. Walker, who said he did not understand that the question now was whether capital punishment should or should not be abolished, it was only on the adoption or rejection of the amendment offered by the gentleman from Dauphin, (Mr. Ayres.) When that question shall arise, a diversity of opinion will doubtless exist, and it would require stronger arguments than any he had that day heard to be urged in favor of such a bill, to gain for it the votes of a very considerable number of members. According to his view, the question now was whether the Governor can or ought to be vested with power to commute capital punishment, and from the decision made by the House upon the amendment offered by the gentleman from Bucks, (Mr. Harrison,) it would appear that we cannot constitutionally pass a law commuting capital punishment, and if such a law cannot constitutionally be passed by the House, how can it delegate to the Governor a power which it cannot possess itself. The vote just taken has shown that the House does not think the passage of such a law as coming within the limits of its powers, and of course, it is equally incapable of delegating the same powers to either the executive or courts of justice. He was followed by

Mr. T. S. Smith, who rose to make a few remarks on the subject before the House. The vote just taken has disposed of the question in the case of Joseph Blundin. He fully concurred in the decision of the House. No legislation intended to meet special cases should be encouraged. All the evils stated in the report of the committee, and many more would result from opening the doors of the legislature to applications of that kind. No individual would relinquish the hope of life till the last effort was made to save it, and the criminal would in every case be transferred from the bar, after a conviction by his peers and the judgment of the law, to the halls of the legislature, to seek a new trial and a milder sentence. But the vote just taken, had established a precedent, which he hoped, would be followed forever hereafter. He had a strong repugnance to the passage of special acts of grace and mercy. They tend to draw from a just judgment the convicted felon, and to substitute a partial hearing, a hasty and imperfect trial, a defective examination, with all the amiable weaknesses of human nature; and the danger of corrupt influence, in the place of their deliberate procedure; the inflexible but merciful strictness of a court, and careful investigation of a jury. But the subject introduced by the motion to amend, made by the gentleman from Dauphin, is the project of a general law not applicable to the case of Joseph Blundin, nor to any one now under sentence of death. His case and the other which has been mentioned, may serve to illustrate the present argument, and are cases in point to establish the justice and humanity of enacting a law, by which the Governor might be authorized, when a proper case is proved by subsequent disclosures, to inflict a punishment short of death, but commensurate with the crime.

He said that in this commonwealth, before the act of the 22d April, 1794, all murder was punished with death. By that act, two degrees of murder were established, the first and most atrocious only to be punished capitally, and the second, where mitigating circumstances were disclosed, to be punished by imprisonment at hard labor, or in solitary cells, for a term in the discretion of the courts not to exceed eighteen years, nor to be less than five years. He, who under the previous law, would have been sentenced to death by the benign provisions of this act, may be imprisoned for the comparatively short period of five years. In this change we see no more than the progress of that spirit of mercy, which began to prevail in this Commonwealth, at its earliest settlement. From that day to the present, we have been carrying out the principle

that moderate but certain penalties are more effectual in restraining crime and repairing the injury done to society, than severe and excessive punishments. Experience has taught us, that it is the duty of the Government to reform rather than to exterminate offenders, and that the punishment of death ought not to be inflicted, where it is not necessary for the public safety. We have advanced far, but we have not fully carried out in practice the salutary principles. There is something yet to be done. There are cases now in existence, where convictions have taken place of murder of the first degree, and the subsequent discovery of testimony has made it manifest, that the culprit has been convicted of too high a crime. Every man can readily conceive that such cases may often occur. If the mind is suffered to dwell upon the condition of such a man, and the justice of the distinction in the law be at the same time acknowledged, it must be sensible of the cruelty of taking away a life which the law designed to spare. The contemplation of the death of one man, for the same crime for which another is punished by imprisonment, is revolting to a sense of justice. But to him who is sentenced there is no relief but through the executive, and there is no choice given to the executive, but to put to death or pardon. The criminal must either be punished beyond the design of the laws, or be let loose upon society, a blood stained culprit. Some gentlemen have thought that stained and crimsoned as he is, it would be better to pardon him, than to put it in the power of any tribunal or any individual to commute the punishment. But they lose sight of the justice due to the community. They would suffer the criminal to escape, rather than that the Governor should sometimes err in discharging the murderer from a just penalty. That is the whole extent of the danger. The merciful maxim, that it is better that ninety and nine guilty persons should escape, than that the innocent should suffer, forbids the adoption of so severe an alternative. The plan proposed suffers neither the guilty to escape, nor those unjustly condemned to suffer. It does justice to the individual, and protects the community, by confining for life, him, whose hands are stained with human sacrifice.

He said that some gentlemen had thought that the legislature had no power to pass such a law, because it would interfere with that provision of the constitution, which gives to the governor the power of reprieve and pardon. Those who adopt the principles of construction applied to the constitution of the United States. In that constitution no power is bestowed that is not granted by express provision. In the state constitutions, every power is possessed by the legislature, except those that are expressly prohibited. This distinction removes the difficulty. It will not be doubted, that the power to establish such a law, resides somewhere. If it does not reside in the legislature, he said, he wished gentlemen would state where it did reside. It was certainly not in the Governor; it must then be in the Legislature, or reserved to the people. But there is nothing in the bill of rights which withholds it from the Legislature, and if the principles of construction he had stated were correct it might exercise the power.

He remarked, that whatever difficulties may arise in reference to interfering with the pardoning power granted by the constitution, it cannot arise under the present project of a law. There is no design to abridge that prerogative. If the law should pass he could still reprieve he could still pardon. He would not be shorn of a single feather of his prerogative. His constitutional power would neither be abridged nor enlarged; the sphere of his discretion would be modified. It would afford him the opportunity, when a proper case should be disclosed, to do less than pardon, to punish the guilty according to the atrocity of his crime.

He thought there would be no danger in depositing such a power in the executive hands; at least that there

is no better depository of such power. The courts of justice, the juries, grand or petit, the Legislature, or either branch of it, would be much more exceptionable. The numbers in such bodies would divide and lessen the responsibility which is less likely to be abused when its whole weight rests upon one individual. In the Governor is lodged the power of pardon, a much greater power than that now proposed to be given, and if he is the proper depository of such a power there seems to be no good reason for refusing to intrust him with a less.

That something should be done towards satisfying the growing disposition in the public mind to abolish the punishment of death, he thought was very obvious. The progress of better feeling and better philosophy teaches us that we should reform and not exterminate the criminal; the calls of justice and the voice of mercy require it, the constitution does not prohibit it, and the voice of the community seems to demand it.

Mr. S. F. Reed, then addressed the house. It is not, said he, my intention to reply to the many arguments which this question has elicited. I agree with the gentleman from Erie (Mr. Walker), that if there is any power placed in the hands of the executive of this commonwealth, affecting the question before us, that power is contained in the eleventh section of the 2nd article of the constitution. [Mr. Reed here read that section.] The right which the governor has to suspend for a time by a reprieve, or totally to annul, by a pardon, the sentence of the court, in cases of this kind, was given to him by the people—and we therefore have no legal right to interfere, in the slightest manner with such power. We are here the mere representatives of the people, in General Assembly, and to assume any other character—such as delegates to alter or suspend the constitution—is entirely unauthorized by any principles which are conferred on us by our constituents—and an action of the legislature upon the amendment empowering the Governor to commute the punishment of Blundin from death unto imprisonment, for a number of years or for life, is an express infringement, not only of the section of the constitution I have just read, but upon the duties of the executive. I conceive, Mr. Speaker that the people were competent in wisdom, when they thus placed, in a particular branch of the government, this power of pardon or reprieve—and I assume nothing for those around me when I say, that they have wisely disposed of the amendment just rejected; thus declaring, that as they had but the doubtful power to interfere constitutionally with the commuting of Blundin's punishment, they would expel the matter from this house—that, as certain duties have been delegated to them as representatives, they will not grasp at, and exercise others, that the people have properly reserved for the especial exercise of those whom they may choose, for amending or altering the constitution. I repeat, sir, that the constitution adopted by the people, having placed in the hands of the executive certain powers, those powers cannot be remodeled or extended by this assembly—nor by any other except where the people delegate a right to change that constitution. The last act in this and all similar cases, being placed by the people in the Governor, no legislation can possibly take place, that does not either annul the constitution, when it places the pardoning power in the Governor—or delegates to him power, which we do not possess by virtue of our representative capacities, either expressed or implied.

The gentleman from the city, (Mr. Smith) in order to procure the acting of this house in favor of the amendment, has spoken of and adduced cases where, after trial, conviction, sentence and execution, it has appeared satisfactorily, that the criminal so convicted, was innocent—but such cases, I think, can have no bearing on the one before us. We, nor no others, interested as judges, jurors, executive, or those who are here improperly asked to interfere in this matter, have any thing to dread, in the result of this unfortunate occurrence. If Blundin is executed, there is nothing to

which we can refer in the circumstances of his case, that can possibly take place, to even suggest a doubt as to his guilt, in the transaction for which he has been accused and convicted. Who of us, remembering the circumstances at all, but remembers that the murder was committed in the presence of the companions of the deceased and prisoner. A violent blow, a meal with a scythe—the parties in the open highway—the deceased in flight from a wagon containing these companions—and yet it has been argued, not only by the gentleman from the city, but from Dauphin, that it is proper to bring cases in analogy, where it has been proven, after the execution of a criminal, that he was innocent. I hope, sir, that this argument may be taken to its full extent—for I think, that in view of this question, it amounts to nothing.

I appreciate the motives of the gentlemen from Bucks. They have a duty to perform to their constituents, which, in their ability and desire to discharge faithfully, I would wish, (if in all things consistent,) they could be supported and sustained by this house.—But, I am satisfied, that the relief sought for, is only to be found in the executive and his clemency—confident, as I am, that we should not (if we could legally,) place the power to commute the punishment of Blundin in the hands of the Governor. This case would certainly raise other applications—and would place the members of the city and county of Philadelphia, in a peculiar situation. I believe, sir, that we can point to a case there, that calls forth greater sympathies from the humane and merciful, than Blundin's; and one that, if I could sanction an illegal and improper course of this house, I would, to the extent of my feeble exertion, endeavor to bring within the reach and control of a body decidedly in favor of extending mercy and relief to the culprit, though guilty.

The case of Felix Murray has more claims upon society for an interference, than any that could be suggested here—and yet it is a matter of doubt to my mind, from what I believe to be the correct view of this question, whether, in that case, the wished for legislation in Blundin's, should be extended to Murray's. I would be understood to hesitate, on the ground I have assumed in the commencement, and through the whole course of my remarks—for I am disposed, yes, anxiously hope, that to that individual at least, the mercy of the Executive should be particularly and specially shown.

All cases of capital punishment claim, and to a great degree receive, the sympathies of a great portion of the citizens of this State—not, however, on account of the sentences being unjust—but that criminals so wantonly and recklessly violate the laws and institutions of our country and our God. I hope, therefore, that we may not, by entertaining towards this unfortunate man, such feelings of compassion, break down the barriers which are interposed by the constitution, and thus be more culpable for our neglect of duty, than for a disregard of the feelings of compassion.

**SALE OF COAL LANDS.**—We understand that the Spohn Tract in this vicinity, was sold last week for \$10,000, the contract embracing all the coal on the said tract below the water level, with a reservation of all the coal on the same above the water level. The coal vein on the said tract is about 900 yards in extent, and the same may be mined within the limits of the tract about 500 feet in depth. The public abroad are not generally aware of the value of coal lands in this vicinity, the speculating mania which formerly prevailed having had a tendency to prevent subsequently the spread of correct information. The actual value is difficult of computation, but we have no doubt that coal lands are now rated far below their intrinsic worth. We have no desire to be instrumental in reviving an inordinate spirit of speculation, but we think that there never will be a safer period of investment than the present.—*Miners' Journal.*



From the Philadelphia Gazette.

## PROCEEDINGS OF COUNCILS.

Friday Evening, Dec. 26th, 1834.

### SELECT COUNCIL.

Mr. Price presented a petition from the Harmony Fire Company asking permission to erect a house for their engine, on the lot of ground on Fifth near Chestnut street, from which they were removed by Stephen Girard, in 1827. Mr. Fraley, in Common Council, presented a petition of a similar import. Referred to committee on Fire companies.

Mr. Wetherill from the watering committee, made the annexed report, which was laid on the table.

#### *To the Select and Common Councils of the City of Philadelphia.*

Gentlemen—The Watering Committee in compliance with a resolution of Councils, instructing them to state what will be the probable consequences to the Water Works at Fair Mount, in case a canal, to be supplied with water from Fair Mount pond, should be made on the west side of Schuylkill, beg leave to report, that the agreement which has been entered into between the Schuylkill Navigation Company and the City, renders it very essential that no other company should have a control over any of the water which shall be taken out of said Fair Mount pond; for in case the city should deem it necessary to pump as much water for the supply of the City and Districts as will be within their agreement, the evaporation and leakage from the contemplated canal would no doubt reduce the water so low, as to give the Schuylkill Navigation Company the right to shut the gates of the works at Fair Mount, as per agreement, which is as follows:

"And it is also further agreed by the parties to these presents, that should it at any time happen that the waters should be drawn off below the top or surface of the dam, it shall be lawful for the said president, managers, and company, to fasten up the gates or openings used by the said Mayor, Aldermen, and Citizens of Philadelphia, to draw off the water and keep the same fastened, until the water shall be raised as high as the top or surface of the dam."

Should the conditions of this section of the contract with the Schuylkill Navigation Company be put in force, there will be a difficulty to ascertain by whom the water is consumed, and the city alone would suffer all the injuries that would result.

It is the opinion of the committee that should the contemplated canal be constructed, that there is not a sufficient quantity of water in dry seasons for the operation of the works at Fair Mount, the Schuylkill Navigation Company and the canal in question—this opinion has been formed from a careful investigation of the subjects, as will be seen by the following statement of facts.

In the year 1822, when the water power works first started, only 1,600,000 gallons of water were required daily; while in the present year the consumption has increased to 3,500,000 gallons, during the months of July and August last, for many days 5,000,000 gallons were consumed, and on the 9th and 11th of July, when the reservoir was gauged, it had increased during the day time to 7,000,000. This excess of the use of water over former years, induced our superintendent to keep an account of the time the wheels worked, and which was found to exceed 17 hours in 24; as the tide impeded the working of the wheels 5 hours, it only left two hours excess of time each day, for packing the pumps and keeping the machinery in working order; and had any accident occurred to either wheel during that period, the works at Fair Mount would have been incompetent to supply the city and districts with water.

If a similar drought should occur during the next

summer, there cannot be a doubt but that the six wheels and pumps now ready for work, will drain Fair Mount pond below the top line of the dam; and it must be obvious that as the water is lowered in the dam, the power is reduced: by observation, the gates which now open 8 inches, to give a supply of water to the wheels, were during the drought frequently opened 12 inches—consequently, at a time when water is most wanted in the city and districts, (to which a supply for Kensington must be added) the water power at Fair Mount will be least adequate to supply it.

Under such circumstances, the committee are of opinion that nothing should be risked; particularly when it is known, that for several weeks during the last summer the dam was dry nearly 800 feet across; at a time when the consumption of water for the prevention of Cholera and other epidemics in the city and districts, had nearly exceeded our means.

If no more water should ever be wanted hereafter, than was supplied to the city and districts in July last, something might be risked to give a supply to the proposed canal—but when it is obvious that the consumption of water in the city and districts will become greater in ratio with the increase of improvements and population, nothing should be left to hazard. And under any calculation your committee can make, they are of opinion, that before the expiration of the next ten years, an arrangement will have to be made for an auxiliary water work, to be erected at Flat Rock.

In 1822, the necessary quantity of water as before mentioned, required daily to supply the city, was 1,600,000 gallons.

In 1833 it required 3,500,000 to supply the city and districts, which in ten years hence no doubt will be increased to 7,000,000 gallons daily, and in the summer it will probably amount to 10,000,000, when either quantity will be more than can be raised at Fair Mount in times of drought.

In 1822—the number of water takers in the city amounted only to 4,758,—in 1834—the number in the city and districts has increased to 13,584,—in 1822—there were but 280 fire plugs in the city,—in 1834—they have increased in the city and districts to 800,—in 1822, about 35 miles of small calibre wooden, with a few iron pipes, supplied the city with water,—in 1834 upwards of 78 miles of iron pipe of large calibre have been laid in the city and districts.

The committee flatter themselves that the increased consumption of water, and the extent of its distribution since 1822, will sufficiently show that the present works cannot be relied upon much longer; unless the dam at Fair Mount shall be raised, or some other means devised, whereby the power of those works may be increased to meet the demands upon it.

As the resolution of Council does not require an opinion from the Watering Committee on the merits or demerits of the proposed canal, the committee will satisfy themselves by merely mentioning that if the canal and docks reaching from it to the river (which are designed to be 12 feet above low water) are permitted to be extended along the whole river front, the leakage between the wharf timbers and heads of the docks will be more than is ample to supply all the locks at Fair Mount, when the trade shall be so much increased as to keep them in constant action.

Under every view of this important question, the committee are decidedly of opinion that the proposed canal, if carried into effect, will increase the scarcity of water at Fair Mount, and under existing agreements between the Schuylkill Navigation Company and the City, be the means of stopping the works altogether.

By order of the Watering Committee.

JOHN P. WETHERILL, Chairman.

Attest,

SAM. A. RESE, Register.

Mr. Price, from the committee on Schuylkill wharves made the following report, the resolutions attached to which were adopted:

The committee on Schuylkill wharves request leave to report—That the lease for Sasfras landing having expired, the property has been given up to the city, and an application has been received from Thomas Clyde to obtain a lease thereon, at the same rent heretofore received, and your committee would recommend its acceptance; they therefore propose the following resolution.

That the City Commissioners be and they are hereby authorised to execute a lease to Thomas Clyde, for Sasfras landing on the Schuylkill, to expire on the first of April, 1837, at an annual rent of \$200, payable quarterly.

The committee would further report, that in the necessary care and attention they have given to the property of the city, near the Schuylkill, they have been convinced that a decided advantage would be gained, if the committee were authorised to permit the City Commissioners to grant leases on the wharves and real estate, under the care of the committee, for a term, not exceeding the 1st April, 1838, and the following resolution is offered:

Resolved, That the committee on Schuylkill wharves, be and they are hereby authorised to receive proposals for such of the wharves on the Schuylkill, and such of the real estate, belonging to the city, on the east and west of said river, near thereunto, as may be deemed expedient, by the committee, for a term not exceeding the 1st of April, 1838; and that the City Commissioners are directed to execute such leases, as may be authorised by said committee. Provided, that previous to making any lease it shall be the duty of the committee to advertise for proposals.

RICH'D PRICE, Chairman.  
DENNIS M'CREDY,  
JOHN GILDER,  
THOMAS EARP.

In Common Council the first resolution was *negatived*, and the second *adopted*.

Mr. Price called up for consideration the ordinance relating to an increase in the salaries of certain city officers, as published in our last report. The bill was read three times and passed. In Common Council, after the first reading, the bill was postponed.

Mr. Lippincott offered a resolution requesting the President of Councils to forward to the legislature, copies of the accounts of the Treasurer of the Girard Estates and the report of the building committee and architect of Girard College, which was agreed to.—Common Council concurred.

Mr. Price, in his place, asked and obtained leave to read an ordinance providing for the repeal of the ordinances for Sanitary purposes, enacted in 1832, and authorizing the Mayor to draw his warrant on the City Treasurer, for such claims, for Sanitary purposes, as have not been liquidated. Laid on the table.

#### COMMON COUNCIL.

Mr. Chandler presented a petition from James Barber, one of the city watch, who was seriously injured on the night of the Ward Election, in a scuffle with a gang of ruffians, by which two of his ribs were broken, praying for relief as an equivalent for his loss of time while prevented from attending to his duties. Mr. Lewis, in Select Council, presented an application of a like nature. Referred to committee on lighting and watching.

Dr. Huston, from the committee on lighting and watching, made a report in relation to a re-organization of the police system, accompanied with a bill for carrying the same into effect. The report is as follows:

The committee on lighting and watching, in obedience to the resolution of Councils instructing them to

inquire into the present mode of watching the city, offer the following Report:

The present police force of the city, exclusive of the Mayor, Recorder, and four high Constables, consists of one captain, four lieutenants, and twelve Inspectors of police; twenty-eight day policemen, four of whom are attached to the Mayor's office, and one hundred and twenty watchmen.

Of this number, forty, viz: twelve Inspectors and twenty-eight policemen, by the existing ordinance on the subject, are assigned to the performance of day duty; while but one hundred and twenty watchmen, are charged with the care of the city during the night. Or in other words, one fourth of the effective force of the present police, are employed during the day, and three fourths during the night. This is exclusive of the captain and lieutenants, whose functions are proper to both.

The committee are of opinion that the experience of the past year, during which this system has been in operation, has not shewn that any advantage was derived from the employment of so many officers during the day, while the expense of the city has been largely increased by it.

Connected with this plan, we have also a number of Section Houses, as places of rendezvous for those officers, at a heavy annual cost.

The committee therefore propose that the Section Houses be dispensed with; and that the twenty four day policemen, who are assigned to the care of the sections, be discontinued, and that hereafter, the supervision of those sections shall devolve on the Inspectors. They also recommend that the four policemen attached to the Mayor's office be discontinued and their duties be discharged by the High Constables, as formerly.

If the plan now proposed shall be adopted by Councils, it will reduce the amount of salaries nine thousand dollars per annum, besides saving the expense of the section houses; thus making a yearly reduction of the expense of the city, in the police department, of more than ten thousand dollars.

In conformity with these views, the committee have prepared the accompanying ordinance, which they submit as a part of this report.

R. M. HUSTON,  
JOHN P. WETHERILL,  
JOS. LIPPINCOTT,  
JAMES ROWLAND,  
B. H. YARNALL,  
MANUEL EYRE

Philadelphia, Dec. 26, 1834.

The ordinance was taken up in committee of the whole. Mr. Dunlap in the chair, and after various amendments, agreed to, and reported to Council. The bill was then read a third time and adopted. In Select Council the subject was postponed until the next meeting.

Mr. Gilder, from the building committee of the Girard College, presented a report in relation to the proceedings of the committee during the past year, accompanied with a statement from Thomas U. Walter, architect, detailing the present situation of the College. Ordered to be printed. These reports will be noticed hereafter.

On motion of Mr. Chandler, it was resolved, that so much of the report of the building committee of Girard College, as recommends an appropriation of \$8,500, for repairs upon the College farm, be referred to the commissioners of the Girard Estates—Select Council concurred.

Dr. Huston, from the committee on lighting and watching, made the annexed report on the subject of lighting the city with gas, accompanied with an ordinance for that purpose, which was ordered to be printed for the use of the members.

The committee on lighting and watching, to whom

was referred the item of unfinished business in relation to lighting the city with gas, present the following as their final report on that subject:

#### REPORT.

The committee have not been able, after all their inquiries and reflections on this subject, to arrive at any other conclusion than that contained in the report of all former committees that have been charged by Councils with the consideration of this subject, viz: *That it is expedient for Councils to introduce this mode of lighting the city.*

If any thing could be necessary, in addition to the facts formerly reported to Councils on this subject, to satisfy the minds of the timid and sceptical, abundance is found in the able report of the agent lately returned from Europe. So universal is the practice of lighting by gas becoming on the continent of Europe, but more particularly in England and Scotland, that not only are the large cities, but many of the villages and even some of the turnpike roads, illuminated by this means. And in our country, nearly all the principal cities are pursuing the same course.

Philadelphia, confessedly the best adapted, having every possible advantage that nature and art could confer for the purpose; and owning too, all the materials for its manufacture—she who possessed every inducement to take the lead in this great modern improvement; doubts and fears even to follow her sister cities.

Believing as the committee do, that Councils cannot long hesitate on this subject, they now present an ordinance for the erection of Gas works to light the city, to be constructed on a limited and economical plan, embracing the most modern improvements in the art.

R. M. HUSTON,  
JOS. LIPPINCOTT,  
JOHN P. WETHERILL,  
JAMES ROWLAND,  
B. H. YARNALL,  
MANUEL EYRE.

Philadelphia, Dec. 26, 1834.

#### MEETING OF DRY GOODS DEALERS.

At a meeting of Dry Goods Dealers, held pursuant to a call, at the Exchange on Tuesday evening, 30th instant, the meeting was called to order by Moses Kempton, on whose motion Matthew Newkirk was called to the Chair, and Richard D. Wood, and Abr. R. Perkins, appointed Secretaries.

The Chair having stated that the object of the meeting was to take into consideration an agreement of certain Importers and Commission Merchants to alter the present mode of measuring Dry Goods.—

The following preamble and resolutions were offered by John Welsh, jr. Richard Price, with some appropriate remarks, moved their adoption—and having been seconded by Jno. M. Atwood, in a lucid, argumentative and serious address, were unanimously adopted.

Whereas, by an advertisement published in the daily papers, it is made known to this meeting that a number of Importers and Commission Merchants have pledged themselves to alter the usual standard of measuring Dry Goods:—

And whereas, the adoption of the plan they recommend in lieu of the present long established custom, both of this country and Great Britain, a usage valuable alike for its uniformity and justice—would be detrimental to the best interests of the community.

Therefore be it resolved, That we entirely disapprove of the proposed change in the established custom of measurement.

Because, it is not in accordance with the custom which at this time is acknowledged by the national government, and by the instructions of the Secretary of the Treasury dated Sept. 9, 1828, is made the rule by

which all duties on Dry Goods are estimated in each port of entry in the United States.

And, That in accordance with the existing custom of measurement, the purchaser does not receive more than 36 inches to the yard, with very few exceptions, in consequence of the elasticity of that part of the Goods to which the measure is usually applied—

And because, it will render it extremely difficult for the retail vender of goods to realize by his sales the lengths for which he has paid—

And because, it will offer continual temptations to vary from the honest practice of giving full measure—

And because, it will be the occasion of frequent dissatisfaction on the part of the consumers—

And because, it is calculated to depreciate the present high moral standard of the merchants of this community.

Resolved, That from our long and intimate intercourse with the great interior, we feel it to be our duty as citizens of Philadelphia, to protect the merchants of the South and West, from the effects of a change which we are well persuaded would injuriously affect their interests, and meet their most decided disapprobation.

Resolved, That we deem it of great importance to all dealers that there should be a national standard, and principle of measure, to prevail throughout the United States.

Resolved, That a committee of twelve be appointed to wait on the importers and commission merchants who have entered into an agreement to introduce the new mode of measurement to express our objections to the attitude they have assumed, and respectfully to request them to abandon or postpone their project—and also to confer with them for the purpose of producing a joint memorial to Congress to pass such acts as will secure an uniform standard of measure, and the mode of its application.

Resolved, That in the event of a refusal on the part of those Importers and Commission Merchants, who have signed the pledge; to accede to the propositions of this meeting. That the committee be empowered to call a meeting of the merchants in this place, on Friday evening at 7 o'clock, to carry into effect, their determination to resist the proposed alteration.

On motion of John Welsh, jr.

Resolved, That the chair appoint the committee of 12, under the 4th resolution.

The following gentlemen were appointed.

John Welsh, jr.	Moses Kempton,
John M. Atwood,	Alex. Ferguson,
Richard Price,	Lewis Brown,
James Fassitt,	Daniel Bray,
Isaac Barton,	William Musgrave,
David Williamson,	George W. Edwards.

On motion of George W. Edwards,

Resolved, That the chairman and secretaries of this meeting be added to the above committee.

On motion of Richard Price,

Resolved, That the chairman of this meeting, be chairman of the committee of 12.

On motion of George W. Edwards,

Resolved, That the proceedings of this meeting be published in all the daily papers of this city.

On motion adjourned

MATTHEW NEWKIRK, Chairman.	
Richard D. Wood,	} Secretaries.
Abraham R. Perkins,	

#### PENNSYLVANIA AND OHIO CANALS.

*Extract from the Message of Gov. Lucas, of Ohio.*

"Viewing a communication between the Pennsylvania and Ohio Canals to be a subject of great interest, it is with peculiar satisfaction I communicate to you the intelligence, that the Sanly and Beaver Canal Company was organized during the last summer, un-

der the liberal provision of the original charter, and the munificent grant of the Legislature in an amendatory act of the last session. \$240,000 of the stock has been taken, and five sections, on the Summit, containing two miles and a half of its length, were let to contractors on the 19th of November last, and the work is now in the full tide of successful operation. By the report of two able and experienced Engineers, all doubts have been removed from the public mind, as to the supply of water on the Summit, and is conclusive as to the question of an abundant supply of water for all the demands of an extensive commerce. The length of the Sandy and Beaver Canal is 76 miles, connecting the Ohio Canal at Bolivar with the Ohio River and Pennsylvania Canal, near the mouth of little Beaver. It passes through a rich and fertile part of the State of Ohio, and will form the connecting link between the Pennsylvania Canals and the Ohio Canal.

Such a connection has long been a desideratum to the people of the interior and southern parts of Ohio; as it will open to them a new and short route to the eastern markets for their abundant produce, and will enable the Eastern and Western merchants to transport goods from the East at a much earlier period of the spring, than by the N. York Canal.

This work, together with the Mahoning Canal, I have always viewed with deep interest. I have considered them both closely connected with our general canal policy and would have been glad to have seen them both embraced in that policy as part of our public Canals. The Sandy Canal will open the most direct communication between the Pennsylvania Canal and the interior and southern parts of the State, and the Mahoning Canal with the Pennsylvania Canal, the northern portion of the State and the great northern Lake. These works, together with the Mad River and Sandusky Rail Road (the work on which it is expected will be commenced by the company next spring,) are works that recommend themselves, by their public importance, to the peculiar attention and patronage of the General Assembly."

**COAL TRADE.**—While the exportation of coal from the eastern section of this state is becoming a matter of immense importance, the same business is rapidly increasing in the western section of the state. We have lately called upon Mr. George Ledle, who is largely engaged in that business, who furnished the following information:

During the week which followed the rise of the river, in the middle of November last, there were sent from the landings on the opposite side of the Monongahela river, from Jones' ferry to Saw Mill Run, about 75 boats, carrying about 245,000 bushels or 6,187 tons of coal—boats and cargoes valued at about \$18,000. About the same quantity passed down from the country along the Monongahela, around Pittsburgh.

The total value of coal annually shipped from the Monongahela, and from the banks opposite Pittsburgh, may be estimated at about \$100,000—is rapidly increasing in amount, and must continue to increase, as the use of coal is becoming more general below

*Pittsburg. Gaz.*

From the U. S. Gazette.

Being at Cincinnati, I was desirous to send a small lot of freight (three barrels) to Philadelphia, and was about despatching it by the usual way, down the river to New Orleans, and thence round by sea. Wishing to save time, I thought that I could do so by way of Pittsburgh, expecting, however, that the cost of transportation would be somewhat greater. But, to my surprise and gratification, I found that not only would time, but a considerable amount of expense, be saved, by forwarding the articles to Pittsburgh, thence by our canal to this place.

I ascertained by inquiry, that the freight, from Cincinnati to New Orleans, would cost me \$1 75 per bbl. which on three barrels, is \$5 25

Freight from New Orleans to Philadelphia, which we have paid frequently on the same article, \$1 per bbl. \$3 00

Making \$8 25, which, it will be perceived, does not include either commissions for forwarding, drayages, and other charges in New Orleans, or insurance, which altogether form no inconsiderable additional expense.

Whereas, these three barrels were safely delivered in Philadelphia, in 22 days, and the whole cost of transportation, including every charge for forwarding, was but \$5 91

The same article has generally reached us at from 60 to 90 days, by way of N. Orleans, for delays will almost invariably occur by that route.

I would remark that the cost of transportation in both instances is high on the above, for the amount being so small, there was no inducement to bargain for the same, besides the river was very low, but as these affect both ways alike, the difference is still the same.

**ACCOMMODATION LINE OF STAGES.**—By reference to our advertising columns it will be observed that Messrs. *Allen & Co* have commenced running an Accommodation Line of Stages between this place and Reading, by day-light. Such enterprise deserves encouragement.—*Minors' Journal.*

#### INSURANCE DIVIDENDS, FOR THE LAST SIX MONTHS.

United States Insurance Company,	6 per cent.
and an extra dividend of	6 per cent.
Philadelphia Insurance Company,	3 per cent.
Geniz do,	4 per cent.
Delaware do,	3 per cent.

**VALUABLE CARGO.**—The canal boat Lafayette, of the Western Transportation Line, arrived yesterday, with upwards of one million pounds of merchandize.—*Pittsburg Gazette, Dec. 16, 1834.*

**CANAL CLOSED.**—The Miltonian of the 20th Dec. says: "The Canal at this place was frozen up on the night of the 14th inst. and the river below this town closed on the evening following."

## THE REGISTER.

PHILADELPHIA, JANUARY 3, 1835.

On Sunday evening last commenced a considerable snow storm which continued all Monday. The snow fell to the depth of several inches, so as to furnish pretty good sleighing for several days. The ground is still covered with snow. The storm seems to have been extensive. The passengers by the Amboy rail road, who left here on Monday morning, did not reach New York till Tuesday about 2 o'clock; having been compelled to remain in the cars all night. At Washington City the snow fell to an unusual depth. For a short time the navigation of the Delaware was obstructed by floating ice—it is now, however, free.

Printed every Saturday morning by WILLIAM F. GEDDES, No. 9 Library street.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.—NO. 2. PHILADELPHIA, JANUARY 10, 1835. NO. 366.

## MERRICK'S REPORT ON GAS MANUFACTORIES.

*Report, upon an examination of some of the Gas Manufactories in Great Britain, France, and Belgium, under a resolution passed by the Select and Common Council of the City of Philadelphia, January 2d, 1834, authorizing the Gas Committee to engage a competent person to proceed to Europe for the purpose of examining Gas Works, with a view of obtaining the best information as to the construction of works, the manner of manufacturing Gas, and in general make such observations as may be useful, in the event of Councils determining to adopt a plan for lighting the city with Gas.—By S. V. MERRICK.*

To the Select and Common Councils of the City of Philadelphia.

GENTLEMEN:—

In pursuance of a resolution of your body, passed on the 2d of January, 1834, and of instructions from the Committee charged with an inquiry into the expediency of lighting the city with gas, received on the 18th of March last, the undersigned immediately embarked on his destined mission, and during the course of the passed summer has made a careful examination into the various plans and processes, employed in manufacturing carburetted hydrogen gas, for private and public illumination, now in use in the principal establishments of Great Britain, as well as a cursory view of the works in Paris, Brussels and Ghent.

In conducting these investigations, I have to acknowledge the friendly reception I met with from gentlemen connected with gas manufactories, either as engineers or managers, in most places which came under examination, to whose liberality I am indebted in general for opportunities granted for a free inspection of their works, and in many cases for the entire confidence with which their modes of operation and results were communicated.

The gas works which I visited on the continent, being all of English origin, and under English control, I was unable to obtain from them any information of material value, not already derived from original sources which had been brought under previous notice. In the course of this communication, therefore, my observations will be confined to comparisons between systems used in England or Scotland, believing that the purposes of the mission will be fully attained by such comparisons as may there be made.

In preparing this report, I have deemed it my duty, upon reviewing the instructions, rather to take a general view of the arrangements and machinery best adapted to the wants of the city, and to point out the system which appears most conducive to its interests, than at this late day to enter into any laboured argument, to prove the general expediency of a measure, which has received the sanction of so many years experience.

Arriving in a country, the capital of which consumed during the past year, a quantity of gas, equivalent in illuminating power to nearly forty million pounds of candles, which possesses within its limits and populous suburbs, forty-seven stations for making and storing gas, erected by twelve different companies, who have in their construction profitably invested an aggregate

capital of near eleven millions of dollars, and whose arrangements are not now sufficient to supply the growing demand, it appeared too late to inquire, whether gas as a means of illumination, was preferable to any other substance.

If I add to this, the universal testimony of the citizens of that metropolis, and of high public functionaries, as to the moral effect experienced by the facility of producing, at a moderate expense, a brilliant light in the streets and narrow passages, with which that city abounds, adding to the safety, comfort, and convenience of society, it will not be expected that much time will be occupied in demonstrating what is thus forced upon our attention.

If other evidence is wanting to prove the consideration, in which this system is held in Great Britain, I may instance the fact, that during five months travelling in that country, I scarce ever passed a town or village to which the material was accessible, that was not provided with this indispensable means of obtaining light, or was in preparation for it;—and so great has been the extension during the past year, that all the foundries which came under my notice were full of contracts for the delivery of pipes and retorts.

As far as I have been enabled to collect the history of these small works, they have generally been erected by the owners of real estate, as an improvement to their property; and when completed, leased to any individual who would keep them in repair, and pay the best interest on the cost.

Believing as I do, that the formidable objections, raised when this subject came under discussion during the past year, were entirely refuted by the Report of the Committee, who examined into their truth, and being confirmed in the opinion as to the correctness of the statements made by that committee, it is sufficient to refer to that document, in case such evidence should now be deemed requisite.\*

In considering the kind of gas works best suited to the wants of Philadelphia, it will be necessary to take a general view of the systems now practised in Great Britain, the materials employed and the mode of constructing the apparatus for distillation, giving a comparison of the advantages of each plan.

As regards the materials which may be used in the manufacture of gas, to the best advantage, enough has been said in the report of the committee, made to Councils in March, 1832, who carefully investigated this part of the subject, to show how much will be gained by the use of bituminous coal, in stead of the more costly material heretofore partially adopted in this country and in Europe:—and I deem it an argument of no small moment in favour of this mode of lighting, that every material used in the fabrication of gas, will be the product of Pennsylvania labour. The bituminous coal from which it is to be made, may be drawn from the rich mines now open in the interior of this state; the fuel from the exhaustless beds of anthracite, and the lime for purification, from our own vicinity;—and not a lamp will shed its rays over our streets, which has not paid a tribute to the internal improvements of the state.

If any evidence be required in confirmation of their

opinion, it is to be found in the fact, that the use of oil as a material for the production of gas, has long since been abandoned in both countries, and the works used for making rosin gas; even this material has failed to make a successful competition against the cheaper substance, having finally given way after a long struggle.

The rosin gas works of Great Britain, have been, or are about to be converted, at a heavy expense, into coal gas works, and in New York the company who are now erecting their works for supplying the upper part of the city, have been compelled in part to change their plan, and adapt them to the use of both materials.

Believing, therefore, that coal in great abundance and of good quality, may be had for the supply of the works, my attention will be confined to it as a gas making material, and to the plans now in use for its manufacture.

The coals used in Great Britain for this purpose, are various in their properties and values, but for our present purpose may be divided into two general classes, viz. the Cannel or the Parrot coal of Scotland; and the soft or bituminous coal, more abundant in England.

The former of these ranks the highest for the purpose, containing a larger proportion of carbon and volatile matters, with less bitumen than the soft coal; producing a gas highly charged with olefiant gas, and possessing an illuminating power superior to any other known in the kingdom.

This material is in use in Manchester, Stockport, and some other towns in England, and almost universally in Scotland, yielding gas, having a specific gravity varying from 550 to 650, being nearly equal to rosin gas.

The coke from this coal is of but little value in comparison with that produced from the soft coal, being of less bulk than the material from which it is made, and furnishing but a small quantity for sale, after deducting that required for fuel to heat the retorts.

From this material, therefore, but little profit is derived from any product except the gas; but the superior quality of that gas, in connection with the low price of the material, warrants its use in those works which have adopted it, and the proprietors have been compelled to pay undivided attention to increase the quantity of gas, without reference to profit from the residuums.

As in America there is no coal yet discovered bearing any resemblance to this material, it would be useless to dwell here upon the systems used in its carbonization, except as showing the experience of several works, having used precisely the same material, on different systems, and in apparatus varying in construction from each other, but bearing a comparison with those used for the carbonization of the fat or soft coals.

I shall advert, therefore, to the Cannel coal works, after treating of the plans adopted in England for the carbonization of the soft coal, among which the Newcastle, yielding about thirty five per cent. of volatile matters, seems to stand pre-eminent in reputation, producing in the usual mode of operating, from ten to twelve thousand feet of gas per chaldron. Specific gravity, from 4.10 to 4.30.

It may be proper here to remark, that although the specific gravity of gas will not give precisely its value or power of illumination, still, as a general rule, the approximation is so near, that I adopt it as an indicator of the value of the gas, for want of a more accurate standard, which may be referred to in general terms.

The various proportions in which the component parts are found incorporated in the bituminous coals of Great Britain, yielding gas of different qualities, and more or less in quantity, and much to the difficulty of comparing the several systems of working with each other. The results of all comparisons must therefore

be mere approximations, except where coal from the same mines affords the basis.

To seek, therefore, a series of works, in which the same coals were used, appeared to me essential for definite purposes, while I continued to confirm my results by observations elsewhere.

The coal I found in most general use, was that already alluded to, from Newcastle on Tyne, being preferred in London, and on the eastern and south coast of England, to any other within reach; and as some of these works varied in their modes of distillation, it became, for all practical purposes, a standard material by which to compare the respective operations of each, diminishing the difficulty of selecting a plan best adapted to our purpose.

The system upon which gas is to be made, at the least cost, first claims our attention, and resolves itself into three points.

1. The expense of fuel and material for carbonization.
2. The expense, in wear and tear of apparatus.
3. The labour attendant upon its manufacture.

This is a subject on which much diversity of opinion exists among gas engineers—the plan of retort, the duration of the charge, and the temperature at which the process of carbonization is to be conducted with best advantage, are points of controversy among them at this day.

To describe all the plans would be quite useless. I shall therefore confine all observations to those which appear most deserving of merit, and necessary to our present purpose.

The first plan claiming attention is the oven of Mr. King, with which we are familiar at the coal gas works of America. The dimension being five and a half feet wide by six feet long, eighteen inches high at the crown of the arch, and twelve inches at the spring, carbonizing about ten bushels of coal at a heat, or a ton in twenty-four hours.

These ovens are made of thick boiler iron, firmly rivetted together, with the bottom of the same material, set in an arch of brick work, heated by one fire, the bottom being shielded with fire tiles, to protect it from the direct action of the flame, with longitudinal flues under it; the draft, passing over the top of the oven, makes its exit in the crown near the front. Some ovens of this description are in use in Liverpool, with cast iron bottoms, but their value has not been determined on by practice. This plan of carbonization I found nowhere in extensive use, except at the Liverpool works, constructed by the inventor.

Of the cast iron retort, there are many modifications, varying in dimension and shape with the caprice of the constructor, and in many cases without any definite idea of the principle to be aimed at.

They may be divided into three general classes:

1st. The circular retort, from twelve to twenty inches in diameter, and from six to nine feet in length. This retort is used in Manchester, and same other places, in general for the distillation of Cannel, or Scotch Parrot coal. It answers for the distillation of a coal which retains its form in lumps, and is advantageous only from the facility with which its position is changed, when partially destroyed by the action of fire on the under side.

2d. The small or London D retort, so called, in consequence of its having first been used by the chartered company in London, being still in use at their works, and recommended by their engineer. This retort is twelve inches broad on the base, eleven inches high, and seven feet long, carbonizing one and a half to two bushels at a charge.

3d. The York D retort, (so called, in consequence of its having been introduced by Mr. Outhit, of York,) and the modifications of it, among which I should include the elliptic retort, as having the same general purpose in view. The difference between the London

and York D retorts, consists only in an extension of surface upon which the coal is spread, the latter varying from eighteen to thirty inches in width, and about the same dimensions in length and height.

These cast-iron retorts are set in benches of from two to nine in a set, usually enclosed in an arch of brick work, heated with one or two fires, arranged with shielding tiles, so as to prevent a direct action of the flame upon the metal. Some with ascending, some with descending flues.

To describe the particular mode of setting on each plan, would require drawings in detail; a labour entirely uncalled for, as the proper plans will be prepared of the arrangement deemed most effectual.

In addition to these, I have found retorts, or ovens, composed of fire brick, built in form, or of clay moulded to the shape in the arch constructed to receive it, varying in dimension and shape from two to four or five feet in width, which will be treated of in the sequel.

The plan of retort, and the system of working to produce the greatest quantity of gas, of the best quality, is at present a subject of controversy among engineers; and to form a just opinion, requires a careful comparison of the operations of each.

As the whole economy of gas making depends upon the expense of carbonization, it was an object of much solicitude to obtain from the books at the respective works, such statements of their daily operations, as would enable me to form a correct estimate of their advantages, rejecting mere theoretic opinions and verbal statements, if unaccompanied by satisfactory testimony.

In giving the general result of these examinations, it will not be requisite to record the names of the works, as such a publication would be a betrayal of confidence, highly unjustifiable.

These statements have been generally obtained for a short period of time, to avoid multiplicity of figures; but have been compared with the workings for much longer periods, often six and twelve months: the results may, I think, be received with confidence.

The following have been taken as the elements of comparison:

1st. The quantity of coal used for carbonization and fuel.

2d. The product of coke in weight.

3d. The product of gas, and quality.

By deducting the second from the first, we shall have the nett amount of material consumed to produce the third element, or product of gas, in cubic feet, its quality being considered generally.

This mode of comparison has been preferred to the more usual estimate of ascertaining the proportion of fuel used, to the coal carbonized; because the latter method is liable to error, as the quantity and quality of the gas is improved by adding to the temperature at which the distillation is carried on, and consequently increasing the amount of fuel burnt.

In this comparative view, all residuums, save the coke, are rejected; not because they are worthless, but on account of the great difficulty in obtaining a correct statement of the quantity made, and variation in value of the other residual matters.

The vast quantity of tar and ammoniacal liquor, made in Great Britain, has rendered them so far unsaleable, that the latter is often evaporated under the retorts or flues, and the former accounted of more value, as a fuel for heating retorts, than as a marketable product. Such residual matters, therefore, in a comparative statement, do not constitute an item of sufficient importance to affect the result in an appreciable degree, though some difference must exist in the quantity of tar made, when very high degrees of heat are used in the carbonizing process.

The system of carbonization which has longest obtained, and which at the present day is in most general

use, is to fill the retorts with coal, leaving space for the increased bulk of the coke, and for the insertion of tools for its removal, carbonizing with a moderate heat, and allowing the charge to remain exposed to the action of the fire for six or eight hours.

The opposite to this, is to charge the retorts with less coal, or a thinner strata, and to increase the temperature, so as to work off all the gas contained in the charge in three, or at most, four hours.

By the first mode of operating, less fuel is required to carbonize the same weight of coal, and the retorts being subjected to more moderate heat, will remain fit for service a longer period of time. It is therefore contended by its advocates, that the saving of fuel and saving in retorts, more than compensates for any advantages to be obtained by the short charge system.

The opposite doctrine is not new, having been held and practised in the early stages of the art, under many practical disadvantages; but the more easy operations on the long charge system, have been practised in a majority of the works using the bituminous or soft coal.

The attention of several skilful engineers has of late been directed to an improvement in the quality, and increase in quantity, of gas produced, which they have effected, in a material degree, by operating with high temperatures and a thin strata of coal.

Their practice has been founded upon the following theory:

That the first products from the distillation of coal, after the water has been evaporated, contains the greatest quantity of olefiant gas, and consequently has the highest illuminating power.

That if this gas be evolved at a high temperature, it carries with it, in combination, a portion of carbon, which, at a low temperature, would not be disengaged as gas, but would pass over as tar.

That, as the process advances, the proportion of carbon evolved diminishes; while the proportion of sulphur increases.

That after the first two hours, the quantity of gas and its specific gravity diminishes in a rapid grade.

To test the accuracy of this theory, certain experiments were instituted, intended to ascertain the quantity and quality of the gas evolved during different periods of its distillation, varying the quantity charged at each time, the temperature at which it was carbonized, and the duration of the process, so as to embrace a fair comparison of the two modes of working.

The first experiment was made with two York D retorts, twenty-two inches broad by seven feet long, charged with two hundred pounds each of Lambton's Primrose (New Castle) coal, heat kept up to a fair red, and continued for nine hours. The result was, that the production of gas, from four hundred pounds of coal, (five bushels) amounted to sixteen hundred and twenty feet, or less than eleven thousand feet per chaldron; that four-fifths of this quantity was evolved during the first six hours, and more than half evolved during the first four hours. Specific gravity 4.5.

The next experiment, made with the same retorts, heated to a higher temperature, charged with one hundred and forty pounds each, and worked off in six hours. The gas produced from this charge of two hundred and eighty pounds, was seventeen hundred and fifty feet, or in the ratio of eighteen thousand feet of gas per chaldron: six sevenths of the whole product being evolved in four hours. Specific gravity 5.18.

The charge being then reduced to one hundred and twenty pounds to each retort, or two hundred and forty pounds total, was worked off in five and a half hours, producing the same ratio of gas to the chaldron — Eleven-twelfths of the whole product being evolved in four hours; the product in gas, evolved after the four hours, not being worth the fuel taken to produce it.

By carefully repeating these experiments, and taking the specific gravity at various stages of the process, it was found to decrease in each successive half hour, as the work progressed, after the second or third trial; while the result, as respected quantity, proved equally in favour of the short charge system.

The result of these experiments clearly establishes the fact, that the greatest quantity of gas, and the best in quality, may be produced by working a diminished quantity of coal in the recipient at a high heat.

So far, therefore, as quality and quantity of gas produced are concerned, the principles to be followed are,

1st. An extended surface, and thin strata of coal in the retort.

2d. Rapid carbonization, at a high temperature.

From the insulated experiments, such as have been detailed, no judgment can be formed on the other points of comparison; although care was taken to note the quantity of fuel used in each experiment, the correctness of the statement cannot be assumed as a guide to continuous work.

To determine the expense of fuel, required under different circumstances, recourse must be had to the continuous operations of works using the same material for carbonization, and dividing the amount of fuel into the product of gas made, instead of the quantity of coal carbonized; for this mode of estimation the reasons have been given.

The statements now presented are from works carbonizing New Castle coal, at four and six hour charges. As I could obtain no returns from works using the same coal at eight hour charges, the comparisons will be confined to the two first, which are sufficient for our purpose.

Station No. 1. London D retorts, area of surface seven and half feet, set two to one fire; the lower retort cased in tiles, and the return flue passing under the top retort, unprotected; the whole covered with a fire brick arch, charged every four hours with one bushel, or 80 lbs. coal.

Whole amount of coal, used for fuel and carbonization, in pounds,	154,800
Deduct coke made,	59,166

Total material consumed,	95,636 pounds
to produce 551,587 feet of gas, or to each pound 5.75.	
Specific gravity 4.8.	

Station No. 2. Retorts and setting the same as No. 1, area seven and half feet, charged every six hours with one and a quarter bushels, or 100 lbs. coal.—

Whole amount of coal for fuel and carbonization, in pounds,	69,520
Less coke made,	22,433
	<hr/> 47,087 pounds

to produce 222,600 feet of gas, or to each pound 4.6 feet. Specific gravity 4.4.

Station No. 3. York D retorts, setting the same as before, area of surface twelve and half feet, charged once in four and half hours, one and quarter bushel of coal.

Whole amount of coal used for fuel and carbonization, in pounds,	25,360
Deduct coke made,	8,700

Total material used,	16,660 pounds
to produce 91,550 feet of gas, or to each pound 5.40 feet. Specific gravity 4.70.	

Station No. 4. Elliptic retorts, area of transverse section eight feet and one-sixth, set seven in a bench, shielded from the action of the flame by fire lumps, covered with a brick arch, charged with two bushels, or one hundred and sixty pounds, every six hours.

Whole amount used for fuel and carbonization, in pounds,	105,720
Deduct weight of coke,	43,680

Total material used,	62,040 pounds
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to produce 308,000 feet of gas, or to each pound 4.8 feet. Specific gravity 4.33.

Station No. 5. York D retort, set same as No. 1, area of surface thirteen feet, charged every four hours with one bushel and a half of coal.

Total coal consumed for fuel and for carbonization, in pounds,	23,600
Deduct coke made,	9,240

Total material consumed,	14,360 pounds
to produce 92,500 feet of gas, or to each pound 6.44 feet. Specific gravity 5.10.	

It will be here seen, that the result of the comparison between the two systems, as illustrated in these five statements, is as follows:

No. 1. London D, 4 hour charges, 5.75 feet to pound.

" 2. do. 6 hour do 4.60 do

" 3. York D, 4½ hour do 5.40 do

" 4. Elliptic, 6 hour do 4.80 do

" 5. York D, 4 hour do 6.44 do

The quantity of gas produced from a pound of material used, and the quality, as indicated by the specific gravity, invariably gives the advantage to the short charge system.

It should be observed, that the coke produced upon this system, is lighter than by the old plan, and the bulk increased.

These points being established, we are next to compare the economy of the plans respectively taking into view the wear and tear, and the labour required to keep up the supply.

It does not necessarily follow that an increased temperature will create a corresponding increase of wear in the retort, as variable heats have a much greater effect upon them than high heats, if they are kept uniform. The results are not so disastrous upon the retorts used in the short charge system, as might be supposed, provided care is taken to keep the temperature the same; but the difficulty of keeping high heats equal, exposes the retorts worked on this system, to greater risks than by the opposite plan:—to determine, therefore, what will be the duration of them, is difficult, as experience on a large scale has not yet been had to settle this point; although in small works, whose operations have been brought immediately under the eye of the engineer, but little difference in duration has been found between the two plans. Still it would not be wise to draw from their experience conclusions, and refer them to works on a larger scale, which must be entrusted to a greater number of stokers and which cannot be kept so completely under control. In Great Britain, the proportion of gas required during the summer months is so small in comparison to the other parts of the year, that during this period a great majority of the retorts are thrown out of service, consequently in a set of retorts, the usual duration of which is eight months, a sufficient number will be saved to do the work of the other four or summer months; for, except in large cities, the public lighting is entirely suspended during that term, and the private lighting diminished in a great degree.

In a work, therefore, in which the retorts can stand eight months active service, they will require renewal annually to keep the stock whole. In works operating with six hour charges, I have found a better average duration than here stated, and that two complete renewals in three years, being equal to working twelve continuous months may in general be calculated on.

This duration is more than many works attain, and may be considered the highest average that can probably be allotted to them.

Retorts working eight hour charges, often remain in continuous service eighteen or twenty-four months; indeed I have known them thirty. No economy is derived from such long use, because, although the retort will not leak, the product is constantly diminishing, while the proportion of fuel increases from the contracted space in the retort occasioned by the solid particles



of carbon which collect on its internal surface. Indeed this obstruction takes place shortly after the working commences, and the incrustation increases so fast that it is doubtful whether there is much saving effected by retaining a retort in service past one season.

But it is needless to go into minute calculation upon this point. If we lay aside the retorts working eight hours, and form the comparison between those working four and six hour charges we shall find that the additional duration of the last, is compensated for by the diminished number required to do the same work on the first plan, on account of the rapidity of the working, and the additional gas produced from the same material, leaving the wear and tear about equal.

Thus to make 100,000 feet of gas, in twenty-four hours, by the six hour system, producing 11,000 feet to chaldron of New Castle coal, would require nine chaldron and four bushel.

Say 41 retorts each, 2 bushel to a charge, 4 charges in 24 hours.

$41 \div 2 \div 4 = 328$  bushels, at 11,000 feet per chaldron, 100,000 feet.

To make the same gas by the short charge system, at 15,000 feet to chaldron, would require 6 chaldron, 24 bushels coal; say 27 retorts, one and a half bushel to a charge, 6 charges in 24 hours.

$27 \div 1\frac{1}{2} \div 6 = 243$  bushels, at 15,000 feet per chaldron, 101,245 feet.

Thus the number of retorts required to produce the same quantity of gas, bear the relation of 41 to 27.

Now if the retorts, on the six hour plan, require renewing twice in three years, there will be required, for that period  $41 \div 2 = 82$  retorts. While on the other system, lasting but one year, there will be required,  $27 \div 3$ , or 81 retorts.

Thus, notwithstanding the duration of the retorts upon the four hour plan, is less than upon the other, when the expense of renewal is divided upon the quantity of gas made during an extended period of time, the difference is unappreciable; while the former possesses the advantage of requiring less space, and less capital in the original construction of the works.

From this statement, it is evident that, as the labour must bear a proportion to the number of retorts at work, and the quantity of material to be handled, the advantage is decidedly in favour of the last named plan.

In these remarks, reference has been had to cast iron retorts only; but so far as the amount of production is considered, they refer equally to the oven of Mr. King.

These ovens, it has been observed, are made of malleable iron, and in point of economy in wear and tear, have a decided advantage over the cast iron retort, for the work they are capable of, requiring less fuel than many other works.

I should be much inclined to adopt them in preference to the cast iron, were it possible to work them on the short system.

The shape of these ovens is such, as to carry out the principle laid down to the fullest extent, but the extended surface of the bottom renders it impossible to heat them to the requisite temperature, without early destruction to their shape, and soon rendering them unfit for useful service; but I am not at all certain that the adoption of wrought iron retorts, of smaller dimensions, would not be conducive of advantage.

The high price of iron, in this country, led me to examine with care into the plans in use, and experiments now making in England and Scotland, to carbonize in retorts or ovens made of fire-clay or brick.

The original inventor of the e ovens, was I believe, Mr. Grafton, of Cambridge; and one work in Brighton, now operates with them successfully. The manager of the station spoke of them favourably; but I could not obtain an exact statement of his operation; nor could I hear the same good opinion expressed elsewhere,

though many had tried them. At one station, I found two of his ovens in operation, which required as much coal for fuel as for carbonization; but this was accounted for in the thickness of the walls, which had been built of nine-inch brick.

Independently of the high per centage of fuel, required by the ovens of this material, other difficulties occurred in the use of them which almost proved fatal.

In the first place, it was found that the clay, unless made very thick, was a material of too little tenacity to resist any undue pressure; especially where the separate pieces were joined together by cement; and that any accident, occasioning a stoppage of gas in the pipes, reacted so violently as to burst or injure the retort.

This difficulty was remedied by building stays or ties into the retort, connected with the outer arch. But the evil most difficult to be cured, was the tendency to leak at the junction of the cast iron mouth piece, and at the joints, owing to the contraction and expansion of the material under different temperatures.

When the retorts are first brought to their heat, time will elapse before the cement in the joints attains the consistency of the other material, and becomes entirely gas-tight; but while the temperature is kept uniform, little difficulty is experienced when once they have been made tight.

The constant variation in demand for gas, makes it incumbent on the manufacturer to vary the number of retorts in action, as it increases or decreases. Hence the necessity of letting down the retorts; an operation during which the joints, being the weakest part, give way as the brick contracts; and it is more difficult to refill these cracks than to make the original joints with fresh brick and cement. This difficulty has been partially overcome by filling the joints, before reheating, with clay cement, and washing them with a mixture of salt and pot-ash, or some other glaze.

To produce a perfect retort of clay, the only desideratum wanting, is such a combination of material as will not be subject to change of dimension, from any change in the temperature, so that the fires may be let down and re-kindled without causing a waste of gas.

To this end, Mr. Spinney of Cheltenham, an engineer of practical knowledge and skill in his profession, has instituted a vast number of experiments, and succeeded by a mixture of fire-clay, pipe-clay, and silex, in producing the desired results.

The Cheltenham works, under the charge of that gentleman, are provided with retorts or ovens of this description entirely; and the operations of that company are conducted in a manner highly beneficial to those interested, and to the public.

Heretofore, single ovens, of a dimension smaller than Grafton's, have been used by him, each heated by one fire, and while the quantity of gas from the coal carbonized, is quite as much as would be produced by the same system of working in iron retorts, the fuel account is materially increased—the great saving being in the wear and tear, an item reduced to a very limited amount.

In some new benches erected, Mr. Spinney has reduced the size of the retort still more, and set two to one fire, carrying on the carbonization at a lower rate than with the single oven; but this bench has not been in operation long enough to decide whether the saving in wear is not more than compensated by increase of fuel; though, as far as a judgment could be formed, the result was satisfactory.

It should be observed, that these works were operating with eight hour charges, and therefore not obtaining all the advantage which might accrue from using an indestructible material.

I am inclined to think, however, that the clay retorts will be found a valuable acquisition to the gas maker in this country, and am confirmed in this opinion after examining the works of Scotland, in two of which

the clay retorts are in constant use, with highly beneficial results. Here, as well as in England, immense difficulties have been encountered in bringing them to perfection; but their efforts have been crowned with success.

At the work in Glasgow, a fair example is offered of the value of this material, in comparison with iron retorts, in both of which the same species of coal is carbonized.

The principles laid down, of working at high temperatures, are here carried to a greater extent than in any work in England, seven or eight charges being worked off in twenty-four hours, each retort being made to produce near five thousand feet of gas in that period.

To enable iron to stand such excessive heats at all, it is necessary to shield them at all points with fire lumps, rendering them as inaccessible to the action of the fire as if they were composed entirely of clay. The result is in this case, that the fuel account is quite as high as with the clay, while the wear and tear is ten to one in favour of the latter material; for with their utmost care, it is difficult to preserve the iron retorts more than four months, while the clay lasts from twenty-four to thirty months, and costs far less in construction.

The difficulty which exists in the iron retorts of contracting internally, in consequence of the deposit of carbon, has here been remedied in the clay retorts, by occasionally leaving the interior in contact with the action of the atmosphere a few hours, while at a red heat, the oxygen of which combining with the carbon, separates it from the clay surface.

In the work alluded to the most decided preference is given to the clay retorts, where, as well as at the Paisley work, which operates with brick retorts on the same principles, the quantity of gas procured from a pound of coal is ten or twelve per cent. greater than in those works using the same material, where milder heats, incident to the use of cast iron, are in practice.

Although from a careful examination of this subject, I feel persuaded that the use of fire clay-retorts will be found more conducive to economy than those made from any other material in this country, (where the price of iron is more than double its price in Great Britain, and that in the event it will be resorted to,) yet I am by no means prepared to recommend its immediate adoption.

We have no reason to suppose that our skill will enable us to bring to perfection, at once, a material which has cost so much labour and loss to experienced engineers, who have for years been endeavouring to bring it into successful operation, and who have not yet brought it to that state of perfection of which it is evidently susceptible.

The immediate success of an infant gas manufactory depends so much upon the first impressions with which it is received by the public, that it would be unwise to abide any risk of failure, by stepping out of the beaten track at the commencement, and I should by no means recommend any change from plans already known, and well tried.

It will be ample time to make experiments for the improvement of the process and apparatus, when experience has made us masters of the business.

I have therefore selected as the most suitable for the purpose, the retort described as the York D, of cast iron, set in such manner, with three to a fire, as will allow of the substitution of the clay retort, whenever such a change in the system of operating is deemed advisable.

This retort has been selected, because, under all circumstances, it appears to be the one with which the principles laid down may be carried out with the best advantage, being large enough to give them free scope, and least likely to become distorted by the high heats to which it may be subjected in the process of carbonization.

(To be continued.)

From Moore's Philadelphia Price Current.  
PHILADELPHIA IMPORTS—FOREIGN AND COASTWISE.  
FOR THE YEAR ENDING DECEMBER 31, 1834.

1834.	Lead.	N. O. SUGAR.			Sugar.	Cotton.	P. RICO SUGAR.			W. I. SUGAR. St. Croix, St. Thomas, and Cuba.			COFFEE.	MOLASSES.				
	pigs.	hhds.	tier.	bbls.	boxes.	bales.	hhds.	tier.	bbls.	hhds.	tier.	bbls.	bags.	tier.	bbls.	hhds.	tier.	bbls.
January.	960	80			304	40							1248			132		
February,		388		2	138	812	233		108	12			16,768			47		
March,	700	1045		10	610	740	510		146	513			8562			1060		
April,	1589	3054		17	1252	687	517		145	335			7900			1085		
May,	1788	916		1	601	870	466		11	656			6344			134		
June,	1216				1051		729		13	329			7568			469		
July,	7399	803		32	4072		1467		238	287			5955			1447		
August,	6201	782		16	1681		3144		389	109			4618			942		
September,	4847	744		137	1045		1592		26	510			10,403			918		
October,	4970	120			724		1345		50	22			16,189			70		
November,	3811	31	4		1382		1729		355	20			5726			950		
December,	4174	910			1174	1943	97			87						23		
Total,	37,955	8,873	4	215	11,748	16,974	4,585	501	2,076	5,234	10	918	98,869	195	452	9,934	584	3,835

RIVER DELAWARE.

(Continued from page 8.)

MR. DOUGLASS' REPORT.

PRINCETON, Nov. 18th, 1834.

To Garret D. Wall, Peter J. Stryker, and John M. Sherrerd, Esquires, Commissioners of the State of New Jersey, &c.

Gentlemen:—In compliance with your instructions, I have made an examination of the Delaware river, with a view of ascertaining the best place to form a connection between the Pennsylvania canal and the Delaware and Raritan canal feeder—also the best mode of obtaining a supply of water for the use of the Pennsylvania canal, with the least injury to the navigation.

Black's Eddy appears to combine more advantages, and offers more facilities for forming such a connection, than any other place. The eddy is caused by a projection of the main land from the Pennsylvania shore, contracting the river into quite a narrow space. The sudden widening out of the river below this point, creates a counter current, so that boats and rafts incline towards the Pennsylvania shore, and find no difficulty in landing at any stage of the river. Immediately below the eddy, the river takes a sudden turn to the east, forcing the current directly in to the head of Bull's Island, at the head of the feeder, so that boats or rafts, starting from the eddy drift, directly to the entrance of the feeder. The entrance to the feeder is about one mile below the eddy. The water from the eddy is of sufficient depth to float a vessel of six feet draft. If a connection is made at this place, it will be necessary to construct two locks of eight feet lift each, to get into the river from the Pennsylvania canal; also a tow path along the New Jersey shore, from opposite the eddy to the entrance to the feeder, which is all that will be necessary to form a safe and secure connection.

Another place which offers some facilities for a connection, is New Hope. In order to effect this, it will be necessary to connect the feeder with the river, by means of a short canal and lock of ten feet lift, and the Pennsylvania canal by a guard lock or lift lock. If by a guard lock, to insure a safe passage for the boats across the river, it will be necessary for them to run up the Pennsylvania shore some distance, before it will be safe for them to venture out into the current of the river, for fear of being drawn over the dam. The water along the shore for a distance of about one hundred feet from it, is quite shoal; consequently, it will be necessary to excavate a channel three feet deep below low water mark, so as to admit boats of the same draft as the Pennsylvania canal; a tow path along the river bank will also be required. The point to which this channel should be excavated, is about twenty-four chains above the guard lock at a place called Poplar Reef. From this point to the place proposed to connect with the feeder, there is sufficient depth of water to float any craft which can navigate the canals. I am apprehensive, if this plan should be adopted, the channel would be liable to be filled with a deposit from the river, and subject to receive damage in time of floods, and always be a source of perplexity and expense in keeping it in repair. Two plans have occurred to me, in which this difficulty can be avoided. The first is, by converting the present guard lock into a lift lock, dispense with one of the combined locks, and make a canal from the foot of the combined locks along the river bank to the above mentioned place, and lock down into the river by a lock of seven feet lift.

The second plan is, to lock into the river from the level above the combined locks, by two locks of seven feet lift each. In either of the above plans, I would propose to take the water in to supply the canal, through a sluice below the guard locks.

I do not think that a connection can be made with the Pennsylvania canal, without a stipulation to that ef-

From Moore's Philadelphia Price Current.

EXPORTS OF COTTON AND TOBACCO,

FROM THE

PORT OF PHILADELPHIA TO FOREIGN PORTS.

FROM THE 30th SEPTEMBER, 1833, TO THE 30th SEPTEMBER, 1834.

	Cotton.	Value.	Tobacco in hhd's.	Value.	Tobacco in bales.	Value.	Manufactured Tobacco & Snuff.	Value.	Tobacco Stems.
Fourth quarter, 1833.....	86,929 lbs.	\$15,083	134	\$10,794	429	\$3,268	17,452 lbs.	\$3,150	
First quarter, 1834.....	171,802 lbs.	21,086	197	18,366	100	537	6,892 lbs.	404	
Second do. do.....	18,267 lbs.	2,374	336	23,476	50	396	51,106 lbs.	4,016	
Third do. do.....	334,071 lbs.	45,091	65	6,687	503	1,946	31,055 lbs.	5,822	\$1,400
	611,069 lbs.	\$83,604	732	\$61,323	882	\$6,167	126,505 lbs.	\$13,392	\$1,400

**NEW FERRY STEAMBOAT.**—The Camden and Ambey Rail Road Company have built a steamboat for conveying passengers across the Delaware, which is designed to fore itself through the ice. The bows of the boat are solid and covered with iron, and so constructed that it may be forced upon and by its weight break in the ice. The length of the keel is 90 feet, the breadth of beam 40 feet, and she is provided with a very powerful engine which has a 9 foot stroke, also with a spacious and convenient cabin. Her wheels and paddles are made very strong and protected by iron coverings from injury by the ice. We understand she came round from New York, where she was built, to this city, in 22 hours.

fect. Even if it could be done, the Delaware and Raritan canal company would not be safe in being at the expense of making an out-let from their feeder, without an assurance that a connection would be kept open into the Pennsylvania canal.

To obtain a supply of water for the use of the Pennsylvania canal, at Wells' Falls, Mr. Gay proposes to extend the present wing dam upwards about two hundred feet, and construct a dam entirely across the river, **TWO FEET HIGH ABOVE LOW WATER AT THE HEAD OF THE FALLS**, leaving a sluice sixty feet wide and three hundred feet long, for the passage of the descending trade. The proposed location of the dam is about five hundred and fifty feet below the head of the falls: In that distance, there is a descent of 1.25 feet, which will make a dam 3.25 feet high. On examination, I found that extreme low water mark at the head of the falls, was 2.83 feet below the too water line in the Pennsylvania canal; consequently, they will want a dam of that height, above low water at the head of the falls, instead of two feet, as reported by Mr. Gay, which, added to the descent to the location of the dam, will give a dam four feet in height. At all events, I do not think that they can get a sufficient supply of water, with a dam of less height than 3.75.

My present opinion is that the descending navigation will be less liable to be injured if this dam should be constructed about two hundred feet nearer to the head of the falls, and make the sluice walls one hundred and fifty feet above and extend them five hundred feet below the dam, to prevent the boats and rafts descending the river from running on to some rocks which crowd both sides of the channel, and are partially covered with water when the river is at a navigable height. I would also recommend that some rocks be removed and the channel straightened below the dam.

My limited time would not allow me to make a thorough examination of Scudder's Falls; but I am of the opinion that the navigation of the river never can be restored or the channel kept open, so long as the work is in its present unfinished state. The bank forming the head of the Trenton water company's works terminates too near the head of the falls: it should be extended upwards at least three hundred feet, and raised so high that the floods cannot pass over it. It would be best to make a pier of timber crib work, filled with stone. The bank is now so low that the floods sweep over it, and is not protected by walls sufficient to prevent the earth, gravel and stones, from being carried into the channel. The sudden termination of this bank gives a check to the current, and gives it a direction diagonally across the channel. This might be counteracted in a measure by constructing a wing dam from the Pennsylvania shore to near the channel.

Estimated expenses of forming a connection at Black's Eddy:

Two lift locks, eight feet each,	\$16,000
Excavating foundation and pumping,	3,500
Pier, slope wall and wharfing around locks,	2,000
	<hr/>
	21,500
Tow path along the Jersey shore,	1,500
	<hr/>
	\$23,000

Estimate of the proposed works at New Hope and Wells' Falls.

Locking down into the river from Pennsylvania canal, including the canal from the combined locks to Poplar Reef,	\$17,400
Lock and canal to get into the feeder of Delaware and Raritan canal,	19,780
Dam and sluice walls,	15,300
Locks at Nicley's,	8,900
	<hr/>
	\$61,380

It will be observed that the difference between forming a connection at Black's Eddy and New Hope is fourteen thousand one hundred and eighty dollars; and the difference to the Delaware and Raritan canal company will be eighteen thousand two hundred and eighty dollars. Pennsylvania gains by the New Hope connection four thousand one hundred dollars. If the connection is made at Black's Eddy, the Delaware and Raritan canal company will receive the trade on eight miles more of their feeder, than if the connection is made at New Hope, which may be considered a low estimate at five thousand dollars per annum.

There will also be twenty feet more lockage, and two miles more canal navigation by New Hope, than Black's Eddy.

Respectfully submitted, by your obedient servant,  
(Signed,)

E. A. DOUGLASS, Engineer.

If there is to be any restriction as to the use of the water, (which I doubt the propriety of doing other than so far as not to obstruct the channel of the river,) I think it would be well to stipulate that each State can take and use the water for canal navigation, at any place above or between tide and State line.

#### COMMUNICATION FROM S. D. INGHAM, ESQ.

It is the interest of each State to retain the transportation as much as possible on her own canals, but those who have products to sell will seek the best market; when this happens to be at New York, produce at Easton will either pass through the Morris canal, or by unloading, leave the Delaware division of the Pennsylvania canal at Black's Eddy, opposite the head of the Delaware and Raritan feeder; or descend to Bristol, and thence by way of Bordentown to the Delaware and Raritan canal.

The expense of taking one ton of coal by these routes from Easton to New York will be respectively as follows:

By No. 1. From Easton to Newark, ninety and a half miles freight,	\$1 23
Toll,	90½
Newark to New York,	25
	<hr/>
	\$2 38½
No. 2. From Easton to Black's eddy, twenty-five miles freight,	25
Toll,	12½
Boat,	3
Unloading,	10
Delaware and Raritan to New Brunswick, fifty seven miles toll,	48
Freight,	57
To New York, forty-five miles,	45
	<hr/>
	\$2 00½
No. 3. From Easton to Bristol, sixty miles freight,	60
Toll thirty cents, boat ditto eight cents,	38
Delaware river 10 miles,	10
Delaware and Raritan canal, forty miles freight,	43
Toll,	43
New Brunswick to New York, forty five miles,	45
	<hr/>
	\$2 39

The cheapest route will then be by Black's Eddy and Delaware and Raritan feeder: and the amount of toll received by Pennsylvania on it will be but fifteen and a half cents per ton: the question then presents at what other point can a connection be formed between

the two canals which will be more acceptable to Pennsylvania, and not objectionable to New Jersey.

Both canals lie within one lift of the water in the Delaware, immediately above the head of Wells' Falls, from thence downward the Delaware and Raritan rises above the water so rapidly as soon to require several locks to let down into the river; so it is in some degree with the Delaware division, and if a connection were formed below Wells' Falls, all the river boats which would incline to pass into either canal must pass the falls going to, and return from, the point of entrance of the canals. An entrance at the head of these falls would avoid this danger and difficulty, and invite those boats into the canals, whose owners if they were obliged to pass the falls might find it their interest to keep on the river: a connection at a lower point would also be more objectionable to New Jersey. There is another reason for a connection at this point. The trade from the borders of the Delaware on both sides will seek the Philadelphia or New York market, as either may suit best, this trade concentrates at the two villages of New Hope and Lambertville, and unless that from each place can get into the opposite canal by water connection, it will be charged with the expense of crossing the river by bridge or ferry.

There are also an abundant means for the supply of lime on the Pennsylvania side, which is greatly wanted on the route of the Delaware and Raritan canal. The expense of hauling lime across the river in waggons adds about twenty-five per cent to its cost at the Kilns.

With respect to the coal trade it should be observed that Philadelphia can be supplied rather cheaper from the Schuylkill than from the Lehigh, and the coal from the latter mines can be taken cheaper to New York than the former, hence the greater part of the coal from the Lehigh will be taken to the New York market, it will of course take the cheapest route, which as has been shown is that by Black's Eddy to the Delaware and Raritan feeder, now if it be supposed that two hundred and fifty thousand tons of coal go to New York, from the Lehigh, the difference to Pennsylvania, between its leaving her canal at Black's Eddy and at the head of Wells' Falls, will be as follows:

Two hundred and fifty thousand tons from		
Easton to Wells' Falls, thirty-six miles		
one half cent toll,	\$45,000	
Boat toll,	10,500	
	<hr/>	
	\$55,500	
Toll from Easton to Black's		
Eddy, twenty-five miles, a		
half cent,	31,500	
Boat toll,	7,500	39,000
	<hr/>	

In favour of crossing at the head of Wells' Falls, yearly, \$16,500

It is true there will be a corresponding difference against the Delaware and Raritan canal, but this may be compensated in another way as will be presently shown. There is one more reason for making a connection at this place; the Delaware division of the Pennsylvania canal is now fed from the Delaware river by an expensive machinery which at a low time is not sufficient to supply water; some other mode of feeding will necessarily be resorted to, none can be so effective and cheap as a low dam across the river, which could be constructed without any injury to the river navigation, and at comparatively small expense, about one-third of the work being now completed such a dam would facilitate the crossing of boats, improve the landings at the villages above, and furnish an abundant supply of water for the canal, and if a lock were put in from the Pennsylvania canal to the river at the foot of the falls, it would satisfy every reasonable desire as to the river navigation. Pennsylvania may indeed as has been proposed, equalize her advantages by imposing

the same toll on the produce that leaves her canal, which are charged upon that which passes through it, but this policy, however just, if carried far enough to answer the purpose in this case would be odious to the community interested, and whenever resorted to, would probably stimulate great exertion to avoid its effects, for which there are various means. First, A reduction of tolls on the Morris canal. Second, An extension of the Delaware and Raritan feeder up the river with a tow path on the Jersey side, where the water suited. — And Third, A resort to a larger class of river boats, which as there are no rapids of any magnitude between the head of the Delaware and Raritan feeder, and Easton, could with an improvement of the channel be used for a considerable part of the year with advantage. These facts show the danger of attempting a rigid countervailing policy and the greater value of any arrangement which would be reasonable and acceptable to the rival canal interest, as well as those who may be obliged to use them.

If Pennsylvania should attempt the countervailing system, all those of her own citizens who may be affected injuriously by it will continually struggle to have it abandoned, and when the trade of the North Branch of the Susquehanna, and the lake country, shall, as it certainly will, be brought down the Lehigh, the interests opposed to the system will embrace a great extent of territory and population.

It has already been strenuously urged upon the canal commissioners, and before the Pennsylvania Legislature, to make outlet locks at Black's Eddy, although it would cost Pennsylvania, exclusive of the locks, about forty or fifty thousand dollars to make a new feeder to supply the loss of water which these locks would occasion, while the whole expense of an outlet at the head of Wells', with an increased supply of water for the lower division of the canal, and lockage round the falls, would probably not cost half the sum necessary to make the feeder and locks at Black's Eddy, and the probable additional tolls on coal alone, received by Pennsylvania, would be, as shown above, upwards of sixteen thousand dollars a year. These additional tolls must be greatly increased whenever the North Branch trade shall be added, for this also will go wherever there may be the best market, which, before the opening of the ice on the Erie canal, will generally be in New York. The route from Ithaca, in New York, by way of the Lehigh, will become, in fact, an earlier spring route for that fertile region to the New York market, with a choice of Philadelphia in its range: ten miles of tollage on the products and merchandise will be of no small consequence; but a satisfactory arrangement of a question affecting rival interests, and a complete avoidance of a countervailing struggle between neighboring States, is an object of perhaps even more importance.

The inhabitants of New Jersey bordering on the Delaware above Wells' falls, have been long in the habit of dealing alternately for produce and goods with New York and Philadelphia; and they are aware of the same practice on the Pennsylvania side of the river; it is important to both interests to have access to each canal without the expense of crossing the bridge or a ferry, which amounts to about one dollar per ton. They are aware that the use of lime is highly important to the lands in New Jersey, which would be increased to a great extent if the present expense of getting it over the river can be avoided, which is about three cents per bushel. If the lime were relieved from this charge, it could be taken to New Brunswick for about the same sum it now costs in Lambertville, and there is little doubt but that ten thousand tons of it might be sold annually between Lambertville and New Brunswick. — No other connection than that at the head of Wells' falls will answer this purpose, as all the convenient bodies of the best limestone on the Pennsylvania side, are within three or four miles of that place and above

it. The importance of this article to the agriculture of this part of New Jersey can scarcely be imagined, and the amount of tolls and value of the trade and transportation, as it were thus called, is well worthy of attention. It is improbable that even the New York market may be ere long supplied with a considerable portion of its lime through this channel, as by the use of coal for fuel, it can be afforded much cheaper than when it is burnt with wood. In that case one hundred thousand tons would not be an unreasonable estimate of the additional demand.

If the dam already commenced at the head of Wells' falls, be extended across the river and locks made into it, the expense will be the same to pass into the Delaware and Raritan canal at this place that it now is at Black's eddy, but if the Delaware and Raritan company make a corresponding connection it will reduce the expense on coal the amount paid for unloading, viz: ten cents per ton, and the Delaware and Raritan canal company will be more than compensated for the toll on the ten miles of their feeder by the introduction of the limestone from the adjacent quarries in Pennsylvania, which will pass a much greater distance on their canal. They also will be relieved from the unprofitable strife of counteraction and violent competition and every reasonable desire, as well of the State of Pennsylvania as of the Delaware and Raritan company, and of the people interested in transportation on these canals cannot fail to be satisfied.

From Poulson's American Daily Advertiser.

#### STATEMENT

*Of the quantity of Rain which has fallen in each year, from 1810 to 1834, inclusive,—the first fourteen years by the gauge of P. Legoux, at Spring Mill, and the following eleven years by that kept at the Pennsylvania Hospital:—*

	inches.		inches.
1810	32,656	1823	41,815
1811	34,968	1824	38,740
1812	39,300	1825	29,570
1813	35,625	1826	35,140
1814	43,135	1827	38,500
1815	34,666	1828	37,970
1816	27,947	1829	41,850
1817	36,005	1830	45,070
1818	30,177	1831	43,940
1819	23,354	1832	39,870
1820	39,609	1833	48,550
1821	32,182	1834	34,240
1822	29,864		

The whole quantity which fell in the above 25 years was 914,743 inches, which gives an annual average of 36,589 inches.

The rain in each month of the year 1834, was as follows:—

	inches.		inches.
1st mo.	2,49	9th mo.	3,57
2d "	2,32	10th "	3,29
3d "	2,02	11th "	3,01
4th "	2,83	12th "	2,33
5th "	3,52		
6th "	3,99	Total,	34,24
7th "	4,35		
8th "	0,62		

*Penn. Hospital, 1st mo. 1, 1835.*

PORTSTOWN, Pa. Dec. 17, 1835.

Last Sunday night was the coldest weather we have had this season, and the Schuylkill navigation was suddenly closed. We heard the note of the boatman's horn that was wont to peal so merrily, on Saturday evening, but the music like that of Baron Munchausen's seemed frozen in the horn. On Monday morning the Schuylkill was completely frozen over.

From the Commercial Herald.

#### NEW TONNAGE.

The following statement exhibits the number as well as the class of vessels built at the Port of Philadelphia, for the last five years.

1830—2 Ships	553 68 95ths tons.
2 Brigs	579 63
8 Schooners	486 63
14 Sloops	361 56
3 Steam Boats	608.51
	Total 2,590.6-95ths tons.

1831—5 Ships	1936 79-95ths.
4 Brigs	859 20
7 Schooners	342.39
10 Sloops	336.23
	Total 3,525.61-95ths.

1832—4 Ships	1733.42-95ths.
2 Brigs	600.46
3 Schooners	482 71
11 Sloops	516.85
1 Steam Boat	125.48
	Total 3,159.7-95ths.

1833—8 Ships	3196.46 95ths.
5 Brigs	644.51
5 Schooners	351.50
8 Sloops	410.10
1 Steam Boat	314 29
	Total 4,916.86-95ths.

1834—1 Ship	544.28-95ths.
1 Barque	324.92
3 Brigs	558 21
3 Schooners	241.76
10 Sloops	506 57
1 Steam Boat	307.90
	Total 2,483.79 95ths.

Mr. GUER, the U. S. Weigher, has politely furnished us with the following information:

#### RAIL ROAD IRON.

Statement of the Imports of Rail Road Iron, into the District of Philadelphia in 1831, 1832, 1833, and 1834.

	cwt.	tons,	qr	lbs.
1833—Edge Rails and flat Bars	2214	9	2	21
Spikes and Splicing Plates	6	0	2	9
Total	2220	10	1	2
1831—Edge and flat Rails	4969	14	0	0
Iron Chairs for rails	1106	8	0	0
Pins Wedges and Splicing Plates	105	18	0	2
Tons	6182	0	0	2
1833—Edge and flat Rails	9149	9	1	19
Iron Chains for Rails	1428	13	0	0
Pins, Wedges and Splicing Plates	363	5	3	14
Tons	10941	8	1	5
1834—Edge and flat Rails	6412	10	0	0
Iron Chairs for Rails	1306	11	0	0
Pins, Wedges and Plates	445	8	0	0
Tons	8364	0	0	0
Rolled Iron exclusive of R. R. Iron	791	9	0	0
Pig Iron	694	8	0	0

We acknowledge ourselves indebted to Col. RILEY, for the following statement:

### QUERCITRON BARK.

Return of the quantity of Quercitron Bark, Inspected at the Port of Philadelphia, during the years 1833 and 1834. Also, the quantity shipped during the same period, and the stock remaining on hand in store, on the 1st of January, 1832, '33, '34, '35.

Inspected.			Shipped.		
hhds.	tes.	bbls.	hhds.	tes.	bbls.
1833—3414	1	169	3535	1	26
1834—3200	45	414	3434	14	76
			hhds.	tes.	bbls.
In store Jan. 1st 1832			1424	0	77
“ “ 1833			675	1	64
“ “ 1834			554	1	7
“ “ 1835			320	32	45

JOSEPH S. RILEY, Inspector.

### FLOUR.

During the year 1833 there was exported to Foreign Places from the Port of Philadelphia, 127,219 bbls. of Flour.

From the 1st January, 1834, to the 30th September, inclusive, the Foreign Exports amounted to 64,845 bbls.

### CORN.

During the year 1833 the Foreign Exports of Corn from this port were 66,808 bushels.

During the three first quarters of 1834, the amount was 33,263 bushels.

### INSPECTION OF SALTED PROVISIONS.

Inspected from January 1st 1834, to Dec. 31st inclusive, at the Port of Philadelphia—

BEEF....2,792 bbls.	PORK....7,026 bbls.
325 half do.	16 half do.

From the National Gazette.

### GEOGRAPHICAL ESTABLISHMENT.

We have recently had an opportunity of inspecting the Map Publication Establishment of Mr. H. S. Tanner, situated in the four story building at the north-west corner of Chesnut and Sixth streets, in this city. It occupies the first, second and third floors of that extensive range known as the Shakspeare Buildings, which extends about eighty feet along Sixth street, fronting on Chesnut street, and immediately adjoining the Theatre. The exterior of the buildings, having recently been subjected to a thorough repair, presents quite an imposing appearance when viewed in connection with the public offices in the vicinity.

The principal entrance is on Sixth street, by a large doorway which opens upon a staircase leading to the Depository of the Establishment, on the north end of the first floor. In this apartment, which is very extensive and appropriately fitted for its object, the various maps and other works prepared and published by Mr. Tanner, are arranged in geographical order, by which a reference to any map may be had with the utmost facility. Here also the commercial business of the concern is conducted, and the finished maps exposed to sale or prepared for exportation and supply of orders from abroad, which are numerous and constantly augmenting. An idea of the amount of business transacted in this establishment may be conceived from the fact that nearly six thousand copies of the large Map of the United States, alone, have been disposed of since it was first issued, together with a large number of the other maps enumerated in the catalogue, which including other recent publications, comprehends upwards of two hundred maps of various descriptions, some being six, and several of them four sheet maps. The estimat-

ed cost of the engraving alone of this immense collection of copperplates, we are informed, exceeds one hundred thousand dollars.

On the same floor with, and immediately adjoining the Depository, is the "Drawing Room," so called, where most of the drafting, projecting and other preliminary operations connected with the construction of maps, are carried on. All the apparatus and appliances pertaining to this department are of the most perfect description. The number and value of the foreign and domestic maps and other works of reference with which it is supplied, afford the means of rectifying whatever errors may have been committed in the engraving or otherwise. By the aid of these and an extensive correspondence with every part of the United States, the maps issued from this establishment seldom fail to exhibit the most recent information regarding the countries delineated by them. In the extensive collection of geographical works composing the library, are several atlases and maps, which have been presented to Mr. Tanner by some of the learned societies and scientific individuals of Europe. Among these we noticed a Universal Atlas consisting of six folio volumes, containing upwards of four hundred imperial sheet maps; a map of Europe, comprehended in one hundred and sixty-four large sheets; an eight sheet map of Sweden, presented by the Academy of Science of Stockholm, through Professor Berselius; together with many valuable works from Vandermaelen of Brussels; from Professor Berghaus of Berlin; from the Geographical Society of Paris, the Royal Geographical Society of London, &c., forming altogether one of the most complete and extensive collections of geographical works in this country.

From the Library we passed into the engraving room, also on the first floor and fronting on Chesnut street. It is a large and commodious apartment, suitably furnished, and having five windows, each occupied by an engraver. These, in conjunction with several other engravers, not permanently attached to the establishment, execute the engraving. The process of map engraving, as practised here, differs essentially from the ordinary method. Instead of finished paper drawings, which were uniformly used not long since, the projections or lines of latitude and longitude, are drawn directly upon the copperplate, which is thus prepared for the insertion of the topographical details consisting of the natural features of the country about to be delineated; these being adjusted in conformity to the geographical points previously fixed, are followed by the location of the cities, towns, roads, boundaries, &c. All this is effected by a small steel point, resembling a sewing needle, inserted in a wooden or ivory handle; which bears the same relation to, and performs the same office upon the copperplate, as does the lead pencil to the paper, by the old method. All the leading parts constituting the representation of both the civil divisions and physical features of the country, having been thus transferred to the plate, it passes into the hands of the engraver, by whom the "plan work," so called, is cut by a small steel instrument termed the graver. When the plan work, (which includes nearly all the work, except the shading of the mountains, water, and the lettering,) is engraved, the names of the larger districts are inserted, then the names of towns, rivers, mountains, &c., and the whole completed by shading the water, mountains, marshes, &c. The engraving department is divided into various branches, each of which is assigned to a different individual, who rarely undertakes any thing belonging to another branch—thus for example: the projections of all maps executed here, and the adjustment of the leading geographical points, are calculated and fixed by the proprietor of the establishment, under whose immediate direction the drawings are made by one of his assistants.

The plates are then transferred to a third person,

who engraves the plan work, then to others who successively execute the lettering, the shading of the water and mountains, and the last completes the map by inserting the title and embellishments. We observed several maps in the various stages of engraving. One was shown us which had been just commenced; it presented to our view little else than a confused mass of reticulated lines and figures, apparently without form or feature; this, we were told, was an embryo map of Venezuela and New Grenada, intended for Mr. Tanner's New Universal Atlas, now nearly completed.

This branch of the establishment is highly interesting, and deserves the particular notice of all visitors. Ascending the stairway leading to the second floor of the building, we entered the printing office, an extensive range of apartments situated in the rear of, and adjoining the coloring room, which we shall describe presently. These rooms contain three or four large copper-plate presses, which are kept in a constant state of activity, and are capable of throwing off from five hundred to seven hundred impressions per day. As this may appear to persons who are only familiar with the common letter printing, to be a small number, we shall notice, briefly, the process of copper plate printing as witnessed by us. The copper-plate press differs altogether from that used in printing from metal types. It is composed of two planks placed vertically, and (in the larger presses) about two feet apart. These planks are joined by a substantial frame work, having a small roller at each end, on which a stout moveable plank traverses horizontally.

In the centre of the frame and equi-distant from the transversing rollers, are placed two larger rollers one above the other, but not in immediate contact. Between these rollers, the plank just mentioned, which corresponds in width with the length of the two principal rollers, is inserted. By the aid of cross bars placed on one side of the machine, the upper roller is made to revolve, and by this means the horizontal plank and lower roller are put in motion by which the impression from the plate is obtained. The upper roller has its entire surface coated with soft woolen cloth, which serves the double purpose of equalizing the pressure and of forcing the paper into contact with the ink, which is previously rubbed into the engraved parts of the plate. This is the most delicate part of the process. It is done, at present, by a hand roller, which has been substituted in place of the "ink ball," formerly in use. Upon the surface of this roller the ink is uniformly spread, and then rolled over the engraved surface of the copper-plate until it is completely covered; the ink is then pressed into the engraved lines, when that portion of it which remains on the surface is entirely removed from the plate which is then prepared for the press. The plate being thus made ready, is placed on the moveable plank, above mentioned, with its engraved face upwards; the paper, which is previously wet for the purpose, is placed upon the plate and the whole is then put in motion, by turning the cross-bar. By this operation, the plate passes under the roller to the opposite side, when the paper is removed, having in its transit, received the ink that was contained in the engraved portions of the plate so nicely distributed as to present an exact image in reverse of its metallic original. About five minutes are consumed in printing a map of the size of the paper used for this Gazette.

From the printing office we passed into the coloring rooms on the same floor. These are very extensive and in every respect appear to be well adapted for the purpose to which they are devoted. They are occupied exclusively by respectably attired females by whom the maps are colored. The neatness and order, apparent throughout this branch of the establishment, cannot fail to strike every beholder. To facilitate the process of coloring, the maps are printed upon highly

sized paper, which is afterwards tested by passing a damp sponge over the face of each, when if any defects in the sizing exists, they instantly appear in small spots of a circular form. By this operation, a useless waste of time and materials in the vain attempt to color such maps is thus avoided. This simple contrivance may afford a useful practical hint to young artists and amateurs in water color drawing.

Liquid colors are employed altogether in this branch of coloring. It consists of three varieties, viz: "washing," "shading," and "lining," sometimes called "narrow lining." By the first mode, the color is spread over the entire surface of a portion of the map, with a large camel's hair brush; much practice is required to produce a uniform tint in all its parts which constitutes the chief beauty of this style of coloring. The second variety (shading) is commenced with a brush similar to that used in the foregoing method; and completed by the application of a wet sponge, resembling, in form, a port crayon; with this are produced those nice gradations of tints from the strongest to those almost imperceptible shades which serve, not only to mark the sub-divisions, but also to beautify, a map. These modes of coloring are almost peculiar to this country. With the exception of some English maps of a recent date, nearly all European maps, with which we are acquainted, are colored by a single faint line extending along the engraved boundaries. This mode, which Tanner prefers over all others, and which he has endeavored to introduce into more general use, here, serves every useful purpose for which coloring is designed; and is free from the objection which is justly urged against the others, from their liability to impair in some measure, that clearness in the engraving, which is so desirable. The public taste, however, was found to be decidedly in favor of full coloring, and in consequence, the lining system is scarcely ever employed except in delineating canals, rail roads, &c. Among the various mechanical employments in which young females are engaged, there are few more attractive or beneficial in every point of view, than that of map coloring. This appears to be well understood, as applications for admission of young ladies, who desire to acquire a knowledge of the art, have always been numerous, and, of late, have become still more so. In addition to the pecuniary compensation (from three to five dollars a week, each,) received by the colorers, they have the opportunity of acquiring an extensive acquaintance with general geography, which the daily inspection of maps cannot fail to impress upon their minds.

Highly gratified by our examination of this branch of the concern, we repaired to the Bindery, a spacious room on the third floor of the building, where the portable and dissected maps are prepared. The portable maps are cut into small sections of the required dimensions, (generally about 3 to 4 inches,) which are pasted on thin muslin, sufficiently apart from each other to allow the map to fold. Great attention is necessary in placing the sections on the canvass, to prevent injury to the map, which would inevitably result from an irregular arrangement of the several parts. The proportion of maps required in this way, is as one to twelve on rollers and varnished.

Maps printed on Bank-note or silk paper for the use of travellers, are also prepared in this branch of the establishment. Large quantities of these Maps are sold here and sent off in every direction.

Immediately in front of the bindery is an extensive apartment occupied by persons employed in mounting maps. Every part of this business is performed by females. The process of mounting is commenced by stretching a sheet of canvass over a square frame, on which the several sheets composing the map (previously coloured) are joined and pasted. When sufficiently dry, two or three coats of transparent size are applied, intended to produce a uniform surface and to prevent the varnish (which is subsequently spread over its face)



from sinking into the paper. When the varnish is thoroughly dry which is usually the case in two or three days, according to the state of the weather, the maps are cut from the frame, bound on two of its edges, nailed upon rollers, and thus prepared it is ready for use.

Last week, we paid a visit to the extensive location of the business of Mr. H. S. Tanner, the eminent geographer. We were so much struck with the variety and value of his arrangement, that we asked for copious memoranda of the particulars, and embodied in the form of an editorial article, which is placed in the second page.

We have entered into details with regard to the several branches of this important establishment, under an impression that such an account would prove acceptable to those of our readers, who have never had an opportunity of inspecting processes which are comparatively new in this country. The map business in the United States is of recent origin. Twenty years since there was scarcely a Map published here. Even maps relating to our own country were imported from Europe for the supply of our libraries and schools. Now the case is essentially altered. American maps are exported not only to England and Europe generally, but also to every other part of the civilized world. Very few comparatively, are now imported from foreign countries, and we feel justified by our late gratifying examinations, in saying, that every process, both scientific and mechanical, employed in the formation of maps, has reached such a state of maturity in the United States, as to render us completely independent on foreign countries for a supply of this indispensable article.—*Nat. Gaz.*

#### DRY GOODS DEALERS.

Agreeably to a call made by the committee of dry good dealers, in favor of the present system of measurement, a public meeting was held at the Exchange, MATTHEW NEWKIRK in the Chair, and R. D. WOOD as Secretary.

The chairman briefly stated to the meeting the course pursued by the committee appointed at the public meeting held on the 30th ultimo, when, on motion, it was

Resolved, That the report be accepted and approved.

The resolutions adopted by a meeting of importers, commission merchants, and auctioneers, was received from their Chairman and Secretary, and laid before the meeting; when, on motion, it was

Resolved, That a committee of fifteen be appointed to co-operate with the committee of importers, commission merchants, and auctioneers, who signed the pledge (to take effect the first inst.) in an application to Congress to establish a uniform standard of weights and measures, and to take such other means for the attainment of that end as they may deem expedient.

Resolved, That the committee appointed by the public meeting of the 30th be continued with power to fill vacancies.

Resolved, That the proceedings of this meeting be published in the papers of this city.

MATTHEW NEWKIRK, Chairman.

R. D. WOOD, Sec'y.

The *Wheeling Times*, says:—"Travellers between this place and Philadelphia, will be pleased to learn that the proprietors of the People's Line Stage Company have made arrangements for conveying passengers from Wheeling to Philadelphia, by way of Bedford and the Columbia rail road, in the short time of 60 hours and at the very low fare of \$12.

#### DELAWARE BREAKWATER.

##### EXTRACTS FROM THE REPORT OF THE WAR DEPARTMENT.

The present condition of the work at the Delaware breakwater is shown in the report of the Quartermaster General, and in that of the commission lately instituted by your orders to examine it. It has been known for some time that gradual depositions were making in the vicinity of this work, by which the depth of water was somewhat reduced. But, until this season, the process was so slow and uncertain, that no anxiety was felt with respect to its final effect upon this great national improvement. Recently, however, the accumulation of sand in the artificial harbor has been much more rapid, and indicated the necessity of a thorough examination by scientific persons, in order to ascertain, if possible, the causes of this occurrence, and to check or obviate them. The views of the officers selected for this purpose will be found in their report; and, agreeably to your directions, they have been adopted by the department. An estimate for one hundred thousand dollars, to be applied to this work, is among the annual estimates of the department, and if approved by Congress, that sum will be appropriated in the manner pointed out by the report, to the completion of that part of the work already begun, and yet unfinished. In the mean time, by a series of observations, frequently and carefully taken, the probable operation of the tides and currents may be ascertained, and the best remedy to counteract them pointed out.

—

A.

LEWIS, Del., Nov. 10, 1834.

Hon. LEWIS CASS,

Secretary of War, Washington:

SIR: In compliance with the instructions of your letter of October 25th, we have made an examination of the Delaware breakwater, and now present the following report thereon:

It appears, by an inspection of the maps representing the state of the works at the close of operations of each year, that, since 1830, every year has presented new additions to a shoal near the west end of the breakwater, and that within the last year, particularly, this shoal has greatly increased.

Before 1833 little had been done on the ice-breaker; since that period this work has been brought nearly to completion, and a shoal on either side of this mass has been observed to be simultaneously forming.

These are the principal facts bearing upon the question before us; and, after a deliberate consideration of them, we unanimously concur in the following opinions, viz.

That the next year's operations should be confined to giving to all the work already begun the ultimate dimensions, omitting any further extension of the work eastward, and waiting during the year, and, if necessary, for a longer period, the further growth of the shoal.

That, in the mean time, very numerous and careful observations should be made to determine the precise amount of enlargement, both in lateral limits and in elevation, of all the shoals.

That a system of observations should be steadily pursued, whereby the force and direction of the flood and ebb currents, at different times of tide, and at different distances from the works, may be accurately given, and clearly represented on the map.

With the extension of the work above water, herein contemplated, the immediate advantage will be obtained of a considerable augmentation of sheltered space; the same extension will serve to indicate, in a more decided manner, the form and magnitude which the shoals may be expected ultimately to attain; it will bring nearer to a solution the important question as to the most proper width to be given to the eastern entrance

to the harbor. And with the aid of the information obtained by the observations on the shoals and on the tides, an opinion less liable to error may be formed as to the exact cause of the shoals, the extent to which they may reach, and, if remedy or correction be possible, the mode and manner of remedy or correction.

Sooner than herein contemplated we believe it would be premature to resolve on any other change than that indicated of the original project, as we believe it would also be premature now to fix upon the matters of detail in the style or manner of the ultimate finish.

We have the honor to be,

Very respectfully,

Your most obedient servants,

TH. S. JESUP,

Major General and Quartermaster General.

JOS. F. TOTTEN,

Lieutenant Colonel of Engineers and Brevet Colonel.

S. THAYER,

Brevet Lieutenant Colonel.

*Presque Isle Harbor, Pennsylvania.*—The depth of water at the entrance is the same as last year, twelve feet, and from thence to the borough piers nine and a half feet at its shoalest place. The borough piers are now made convenient for boats to lay alongside, land their passengers, discharge their loading, and take in wood, and are found more convenient than the United States works. The inlet across the Presque Isle near the west end of the harbor presents no appearance of any change since the survey was taken on the first of August, and communicated to the department on the 12th of the same. No sensible effect has since been produced by this inlet on the eastern entrance of the harbor. The effects of the currents and counter-currents on the sand on which the piers are placed render any estimates that can be made for completing them uncertain. The currents, which are constantly setting in or out of the harbor at the rate of from two to three miles an hour, and frequently changing every hour, have a powerful effect in removing the sand. In my annual report, I submitted the estimates for closing the breach at the junction of the south breakwater and pier. The quantity of stone then estimated for the object being five hundred cords, double the quantity of stone than then estimated will be required. Eight hundred cords have already been placed in the breach, and two hundred cords more, according to calculation, will be required, making, in the whole, one thousand cords. The stone have been thrown in on a line with the piles, and suffered to roll down and graduate themselves. At the extremity of the bar there is now thirty feet of water. In many other places deep basins have been worn, and will swallow up more stone than was calculated. Other places alongside of the breakwater have filled up with sand, where there was a depth of from six to eight feet, and a breach formed for several rods. The breach in other places has disappeared, and a basin formed six to eight feet deep; these changes have taken place in several instances within the last two years. What will be the effects of placing stone on each side of the piers and breakwater, time alone can determine. I am of opinion that this is the only method that can be adopted to give strength and permanency to the work; furthermore, as fast as the stone within the piers or breakwater, or on the outside, settle, to bring them up to their proper height by adding more, and continuing the supply until a firm base is secured. When this important end is gained, and a superstructure of solid mason work executed the whole length of the piers and breakwaters, the work may be considered complete; when the constant watchfulness and repairs which they now require, may, in a great measure, be dispensed with.

From calculation, 1,000 cords of stone, in addition to the estimates of 1833, will be required for 1835, amounting, with the contingencies, to \$5,000; this sum, with

the balance now remaining, will be sufficient for all expenditures previous to commencing the mason work.

Two valuable quarries of stone, which promises a large supply for constructing these works, have been opened this season on the margin of the lake, within one mile of the piers. The stone can be taken by scows direct to the works without the expense of carting. The stratum has a smooth surface of equal thickness; is from 18 to 20 inches thick, and can be easily wrought to any length or breadth required. Stone of this description, and so conveniently situated, will greatly facilitate the operation of the mason work.

An estimate of the stone, lime, and mason work required for the top of the piers and breakwaters, commencing at low water mark, at the harbor of Presque Isle.

South breakwater 3,450 feet in length, 8 feet by 3 in length,	58,800	cub. ft.
North breakwater, 3,000 feet in length, 8 feet by 3 in length,	72,000	
South pier, 800 feet in length, 14 feet by 4 in length,	44,800	
North pier, 1,250 ft. in length, 14 ft. by 5 in length,	87,500	
	263,100	
Estimated at 12½ cts. per c. ft. delivered at the works		\$32,887 50
All the stone to be large, none less than half a ton.		
Coping for breakwaters to be 8 feet in length, and for piers 7 feet: 1 barrel of water lime every 128 cubic feet of wall is 2,055½, at \$2 per barrel	4,111	00
Laying 263,100 feet of masonry, at 6 cents the cubic foot, furnishing their own sand,	15,786	00
Superintending, say	2,000	00
Taking down old piers level with the water,	1,000	00
Add 10 per cent. for contingencies,	5,378	49
		\$61,362 95

#### DIVIDENDS FOR THE LAST SIX MONTHS.

American Insurance Company,	5	per cent.
Bank United States,	3½	"
Pennsylvania Life Insurance Co.	3	"
Lehigh Coal Company,	3½	"
Union Insurance Co.	5	"
S. Permanent Bridge,	4	"
Bank North America,	3	"
Delaware and Raritan Canal and Camden and Amboy Rail Road Co.	3	"
Cumberland Bank, (N. J.)	3	"
Atlantic Insurance Co.	5	"
Marine Insurance Co.	5	"
Fire Insurance Co. of Philadelphia,	3	"
Philadelphia Savings Institution,	3½	"
Trenton Banking Co. \$1 20 on each share.—U. S. Gazette.		

#### FIRST SEMI-ANNUAL REPORT.

PHILADELPHIA SAVINGS INSTITUTION, Jan. 5, 1835.

In compliance with the charter, the undersigned, appointed a committee by the Directors thereof, to make and publish a statement of the affairs of the said institution, met for that purpose at the office, on the third instant.

We proceeded to examine the several statements of the office, and to compare them minutely and carefully with the entries on the books, the vouchers of payment, and disbursements and the amount of cash on hand. It gives us pleasure to state, that we find the whole to correspond with the statements submitted to us with

perfect accuracy, and to exhibit a very satisfactory result of the operations of the last six months.

The committee submit the following statement, as the result of their examination—

*The Philadelphia Savings Institution in account current.*

DR.

To capital stock paid in,	\$59,090 00
“amount received from special, weekly and transient depositors,	114,929 03
“interest on loans,	4,614 87
“unclaimed dividends,	292 50
	\$178,926 40

CR.

By cash on hand,	\$8,508 52
“loans on real estate stock, and other securities,	169,190 28
“expenses for six months,	1,427 60
	\$178,926 40

GEORGE W. SOUTH.  
CHARLES ROBB.  
CHAS. BARRINGTON, Jr.  
J. P. NORRIS, Jr.  
MORGAN ASH.

We find in the Harrisburg Chronicle the following letter, which sets forth a good degree of enterprize.

*Extract of a letter, dated*

HOLLIDAYSBURG, Dec. 22, 1834.

Would you believe it? A canal packet boat arrived at this port a few days since, from Utica, on the Erie canal, in the state of New York. She did not come round by the Hudson, or the Raritan, or by the Jersey canal, or the Delaware, nor by the Schuylkill and Union canals. No! but by a route not thought of every day by the best of our improvement men. She departed from Utica for Montezuma on the Erie canal, thence by the Seneca canal to Geneva on Seneca lake, thence from the lake to Elmira at the head of the Chemung canal, thence by the Chemung canal to the Chemung river, thence down that river to the North Branch of the Susquehanna, thence down the North Branch to the pool of Nanicoke—thence by the Pennsylvania canal to the mouth of the Juniata canal to Hollidaysburg, having thus traversed by water a distance of about four hundred and eighty miles.

The packet is constructed on a new model for canal boats, being composed of two hulls formed in the shape of long narrow batteaux, upon which the cabin is built. She is to run during the next season between Harrisburg and Columbia. Her owner is Mr. Doolittle, an enterprising Yorker, who is engaged at this, and at Johnstown, in building the packet boats which are to form the new passenger line that is to commence running next spring, between Pittsburg and Columbia.

From Nanticoke to the Chemung river it is about one hundred and five miles, and thence to the mouth of the Chemung canal it is twenty miles; of this distance about one hundred and five miles are in the state of Pennsylvania. If the North Branch canal should be continued to the Chemung at Tioga Point, and thence by that river to the Chemung canal, by slack-water, which is said to be very practicable, we would have free communication with the interior of the great Empire State; thereby opening an extensive market to the black diamonds of the Lackawana, and iron of the mountain regions of the Juniata.

I am not, however, in favour of any extension of our canal system at present, with the exception of the cross cut to the Ohio canal, which ought to be made by all means. These hints are only thrown out for the consideration of those who may be disposed to take up the subject at some future and more auspicious period.

Respectfully, &c.

## THE WEATHER.

*Severe Night.*—We learn from the New York Times that the passengers who left this city on Monday morning for New York by the Camden and Amboy Rail Road, reached Burlington at about 11 A. M., and there took the cars. At 6 P. M. they were about four miles from Amboy, and in one of those deep cuttings, were the ground ascends, they were at last brought up by a monstrous snow drift, which arrested all further progress. No effort availed to force the cars over the obstacle, though they backed repeatedly to such a distance as to acquire their fullest momentum. The passengers, many of them ladies, had been without food since leaving Philadelphia, and now with this tremendous storm of snow drifting with the howling wind, had the prospect of passing the piercing cold night in the cars. It was proposed that some of the party should proceed on foot to Amboy, and procure means for bringing on the rest, but the four miles, through unbroken snow drifts, with the falling snow driving so furiously in their faces, seemed too hard a walk, and it was given up. Fifteen or twenty of the passengers then started, about 10 o'clock, to walk back about a mile, to a little house which they had passed, where they sat up all night, but with the comforts of fire and shelter. When they had departed, six or seven of those who remained, seeing the sad condition of their fellow passengers, and especially the ladies, set out on foot for Amboy, and after unparalleled fatigue and suffering, reached there in about three hours and a half. They were able to procure two sleighs, which were sent to bring on the ladies of the party. They arrived at the beleaguered cars about five o'clock in the morning, and took off the unfortunate females, who were nearly exhausted. By day-break the people of the neighbourhood were aroused, and gathering in with their sleighs, the whole party were transported to Amboy, and got aboard the boat between eight and nine in the morning. The boat took the outward passage to avoid the ice on the channel between Staten Island and New Jersey, and reached New York about 2 P. M. on Tuesday.

*Snow.*—It commenced snowing about 9 o'clock on Sunday evening, and continued without much intermission until 9 o'clock on Monday evening, though the quantity of snow fallen is not large, say 8 or ten inches. The weather cleared up after twelve o'clock, but on yesterday morning about six, the sky again became obscured, and gave every indication of a fall of rain.—*Germantown Tel.*

HAMBURG.

Snow about one foot deep now covers our streets, and it is still snowing. The sleigh bells' "merry jingle" greet our ears from all quarters.

MILTON, Jan. 3.

We had a great fall of snow on Monday last. It now lies in this vicinity of an average depth, from fifteen inches to two feet.—Sleighting good.—*Miltonian.*

## THE WEATHER.—PHILADELPHIA.

A gentleman called in yesterday to say that he had just returned from the northern part of Chester County, where, on Sunday morning, at  $\frac{1}{2}$  before 8 o'clock, the Mercury in the Thermometer stood at  $10^{\circ}$  below Zero, and on Monday morning at the same time, it was  $12^{\circ}$  below Zero.—*U. S. Gaz.*

From the Philadelphia Gazette.

## THE WEATHER.

The severity of the weather, within the last three days, has never been exceeded at any time in this city,

within our recollection, although there may have been a single colder day.

Saturday the 3d Inst was a severe day, but there was not ice enough in the Delaware to stop the navigation, and the steamboats departed in the morning as usual. Towards evening it became colder, and at 11 at night, the thermometer, under a piazza exposed to the south, in a central part of the city, had fallen to 13. The Delaware, opposite the city, was frozen over during the night.

On Sunday morning, at 20 minutes before 8, which was about a quarter of an hour after sunrise, the same thermometer was at 4½. At 10 A. M. it rose to 13, and at half past 1 P. M. it stood at 32, the freezing point.

At 5 o'clock it had fallen to	12
At 7 " it was at	12
At 9 " at	11
At 10 " at	10

And this morning at 20 minutes before 8 o'clock, it was down to 3 degrees above zero. The navigation will now probably be closed until the month of February.

At the Exchange, with a Northern exposure, the thermometer was

At 7 A. M. on Sunday, at	3
At 7 A. M. this day, (Monday)	2

The ice on the Delaware is strong enough to bear horses and sledges.

Since writing the foregoing, a friend who resides in Chesnut, below Thirteenth street, has stepped into our office, and given us the following statement of the thermometer at his house with a Northern exposure.

Sunday—6 A. M.	2 degrees below zero.
9 "	zero.
1 P. M.	10 above zero.
Monday—6 A. M.	4 below zero.
9 "	zero.

From another source in Walnut street above 12th, we learn that the mercury this morning was at 2 below zero, at 6 o'clock, with a Northern exposure.

We should be glad to receive from some inhabitant of Southwark, a statement of the weather in that quarter during the last two days.

### THE WEATHER AGAIN.

The following statement is furnished by a gentleman residing near the corner of Walnut and 9th streets, the thermometer having a N. E. direction

Jan. 3—8 P. M.	28 above zero.
" 4—7 A. M.	zero.
" " 2 P. M.	14 above.
" " 8 P. M.	10 "
" 5—7 A. M.	1 below.— <i>Id.</i>

**THE WEATHER.**—The cold continues to be intense. The thermometer was yesterday at 4 P. M. at 28°, at 6 P. M. at 23°, and at 11 P. M. at 13°. This morning 7 o'clock it was as low as 6°, and at 9 had only risen to 7°. We doubt if so long a series of cold days, is within the recollection of any of our citizens of middle age.—*Id.* Jan. 7.

A remarkable change took place in the weather on Sunday. Saturday was comparatively mild for the season, as were also several preceding days. Not a particle of ice was to be seen, when on Sunday morning the wind got to the N. West, and blew with great violence, accompanied by a degree of coldness, which made it freeze in the shade during the whole day. Our thermometer at 1 P. M. in a warm piazza, exposed to the South, was at 42, at 6 at 22, at 9 o'clock at 14, and yesterday morning at half past 6 o'clock it was but 9 degrees above zero. As we saw it with our own eyes, we can vouch for the fact. If our recollection serves, there was not so cold a night during the whole of the

last winter. The Schuylkill is frozen over, but there is no ice in the Delaware opposite the city.—*Id.*

JAN. 7.

**THE WEATHER.**—Within the last twenty-four hours there has been a great change in the weather. The thermometer, which stood yesterday at 1-4 before 7 o'clock, at 3° above zero, was this morning at the same hour at 20° above. The wind since an early hour this morning, has been blowing hard from a north easterly direction, but is now clear. The thermometer on which our personal observations are made, was at 6 P. M. yesterday, (Monday) and at 20, and at 10, P. M. at 17, which we mention to keep up the chain of the last three days.—*Com. Herald.*

The state of the thermometer in West Chester, on Sunday last, at sun rise, was 2 degrees below zero, Monday at sun rise 3½.

**THE ICE BOAT.**—On Saturday we noticed the arrival of this boat from New York, built by the Camden and Amboy Rail Road Company, and intended to ply between this city and Camden, during the obstruction of the river Delaware. Yesterday we witnessed the trial of her powers and if we are to judge from this first attempt, we should say she was fully competent for the performance of the objects of her construction. The ice was about three inches thick, yet she forced her way through it without much difficulty, to the entire satisfaction of hundreds who had assembled on the wharves to witness her first performance.—*Commercial Herald.*

We are informed that the new steam ferry boat of the Camden and Amboy Rail Road Company, left Market street wharf, this morning, at 2 minutes past 8 o'clock, for Camden, with the passengers for New York, and the train of cars left Camden, at 25 minutes past 8, making the time in crossing, the boat having to cut her way through the ice, and starting the cars 33 minutes.

### DELAWARE AND RARITAN CANAL.

**Lime and Limestone.**—Since the opening of this work in July last, 97 vessels entered the locks at Bordentown, laden with the following amount of lime and limestone, nearly all of which came from the quarries and limekilns on the Schuylkill, Pennsylvania, 3,569,722 lbs., lime, equal to 491,21 bushels, of which 181,100 lbs. went to New York; the balance went to landings on the canal, mostly for agricultural purposes; and 4,357,288 lbs. of limestone, all of which was landed at different places upon the canal for different purposes. The last named article would, when made into lime, make the total quantity brought from Pennsylvania, for the supply of that market alone, equal 75,600 bushels.—*Inq.*

## THE REGISTER.

PHILADELPHIA, JANUARY 10, 1835.

By the numerous extracts inserted this week it will be seen that for the last week or ten days, there has been an unusually severe spell of cold weather. The Delaware is now crossed upon the ice with horses and sleighs—and the ice is said to be one foot thick.

We expected to furnish the Index this week, but owing to some disappointments it will not be published till next week—although it is now nearly all in type.

Printed every Saturday morning by WILLIAM F. GEDDES, No. 9 Library street.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.--NO. 3.

PHILADELPHIA, JANUARY 17, 1835.

No. 367.

## MERRICK'S REPORT ON GAS MANUFACTORIES

*Report, upon an examination of some of the Gas Manufactories in Great Britain, France, and Belgium, under a resolution passed by the Select and Common Council of the City of Philadelphia, January 2d, 1834, authorizing the Gas Committee to engage a competent person to proceed to Europe for the purpose of examining Gas Works, with a view of obtaining the best information as to the construction of works, the manner of manufacturing Gas, and in general make such observations as may be useful, in the event of Councils determining to adopt a plan for lighting the city with Gas*—By S. V. MERRICK.

To the Select and Common Councils of the City of Philadelphia.

(Concluded from page 22.)

Having in the preceding remarks attempted to show the system to be pursued for the carbonization of coal on the most economical plan, our attention is next called to the capacity of works required to meet the wants of the city, the mode of construction, and their location, before proceeding to describe the machinery in detail.

To determine the ultimate demand for gas, to supply with light an improving city like Philadelphia, is a task for which we can command no certain data, and which, if attempted, must be purely hypothetical.

Before planning new works, the usual and most natural course is to make an approximate estimate of the wants of the place, and probable demand; but in most old works that have come under notice, laid out upon such estimates, the demand has increased of late years so unexpectedly, that the sites and arrangements are found far too limited for present purposes, and the respective parts of these establishments are in many cases disproportionate to the work required of them.

To plan works on any hypothetical calculation as to eventual demand, would without doubt be a fruitful source of error, requiring some parts more extensive than would at present be required, with the risk of their being too small for future exigencies.

Such estimates, therefore, are only requisite for the purpose of determining the size of the leading mains, or great arteries, for the transmission of the gas from the works to the city, which without doubt ought to be laid of sufficient capacity to meet any contingency; but for the works themselves, the estimate of capacity should be confined to the probable present demand, and the establishment constructed complete as a whole to meet that demand, leaving the future wants to be supplied by a similar range of works constructed by the side of the original establishment.

The advantages which may be expected from such an arrangement, I apprehend will be,

First. That the works may be built upon a uniform and symmetrical plan, with the capacity of each part calculated to meet the wants of every other part.

Second. That no unnecessary capital may be expended in preparing, on a scale commensurate with future wants, parts of the work now required of a small dimension—such as purifiers, condensers, &c.

Third. That in any future increase, the fullest ad-

vantage may be derived from our own experience, and the advancement of the art elsewhere, in adopting improvements that may occur.

A fourth reason for recommending the plan of a series of minor works has forced itself on my attention, while passing through some of the great works of England, viz. the difficulty of preserving a uniform system of working, and of placing individual responsibility on the workmen engaged in managing long ranges of retorts.

I have scarce ever seen in a large work a uniformity of heating: or found the superintendent who could form an accurate judgment of the result of any particular mode of operation.

In such establishments, a general knowledge of average operations can be readily attained, but nothing definite. It is all important in a work where so much depends upon the care of stokers, that means should be in the hands of the manager to judge accurately of the operations of each, which can only be effectually done by sub-dividing the work, having a station meter attached to each division, to record the product of every bench of retorts. I have generally found small works doing much better than those upon a large scale.

It is probable that the cost of labour will be a little enhanced during the summer, when full work is not required; but this disadvantage will be more than counterbalanced by the important benefit that will result by being able to keep the operation of the works under the most perfect control.

In selecting a site upon which to construct the works, the choice must be governed by very simple principles.

The specific gravity of the gas being less than that of atmospheric air, the natural tendency of that fluid is to ascend; the level therefore, of the distributing station, should be at the lowest point of the plane to be lighted. Such a location is always desirable, and if it can be obtained, should be preferred; but as it is not always practicable, experience has shown that considerable depression may be overcome without affecting in an undue degree the equality of the issue at the burners.

When great descents are to be overcome, distinct stations are deemed necessary, effectually to attain this object. I apprehend that without resorting to this expensive mode of regulation, depressions of forty feet may be overcome in a district so small as this city.

The evil resulting from inequality of pressure is most felt when the gas is sold by the time of burning, and not by the quantity consumed.

In the former case the consumers are very careless about regulating the issue of their gas, as the expense to them is unchanged, and the cost of the additional quantity consumed by those burners, placed on an elevated position is borne by the gas maker. If, however, the meter system is adopted and carried into universal effect, the consumers take care to regulate their flame to their own wants, and no loss accrues to any one.

Other important considerations in fixing the location, are convenience to navigation, to a coal market, and to a market for vending coke. All the materials used in the manufacture of gas are bulky, and consequently of expensive transportation. To avoid this additional cost,

is a matter of paramount importance. It is fortunate that the natural position of the city is such, that an easy distribution of gas is compatible with all these objects.

Under the view here stated, it is only requisite to enter into an estimate of the capacity of works suitable to the immediate wants of the community, giving a general idea of the probable cost of their construction.

This estimate will be based on the supposition, that the most populous part of the city will first claim the attention of Councils, and that provision for four thousand public and private lights, will probably be sufficient to meet the demand for two or three years, divided in the ratio of three hundred public and thirty-seven hundred private burners. In estimating the capacity of the works for the supply of this demand, the greatest quantity of gas required in any one night, must be the basis of calculation.

Say 300 public lights burning thirteen hours,	
at four feet of gas per hour, $300 \times 4 \times 13,$	15,600
3700 private burners, average time of burning	
four hours, at four feet per hour, $3700 \times 4 \times 4,$	59,200
<b>Total gas required in one night, cubic feet,</b>	<b>74,800</b>

It has already been shown that the retorts recommended, will carbonize one and a half bushels of coal at a charge, which, at six charges in twenty-four hours, makes a total of nine bushels of coal to each retort.

How far we may be successful in obtaining a coal, which will yield a quantity of gas equal to the New Castle coal, is yet to be determined; but I feel warranted in saying that there will be no difficulty in obtaining a material to produce twelve thousand feet of gas to the chaldron; and shall, therefore, estimate the produce of each retort at three thousand cubic feet.

To insure against accident and loss in distribution, there will be required a bench of thirty retorts to produce this quantity; and, on that scale, recommend that the works be constructed.

In stating this proportion of public and private lights, it should be observed, that the ratio is likely to diminish after the pipes pass into streets less occupied for business, until the gas is generally introduced into private houses.

In estimating the cost of the station here described, it must be observed that the data are of the most general character, because, until the location is fixed, the works laid down in detail upon plans, and a knowledge is had of what walls, levelling, wharves, &c. are required, no accurate estimate can be given.

It is sufficient for our present purpose to say, upon a comparison with similar stations in England, and making due allowance for difference of cost in the two countries, that the station here noticed will not exceed thirty-five thousand dollars, and probably come much under that sum. This is exclusive of mains to convey the gas into the city, or effect its distribution when there; but includes the retort house, gasometers, and all other apparatus necessary.

After taking a view of the carbonizing process, a brief sketch of the machinery required to prepare the gas for use, and distribute it over the city, will close this part of the subject.

After leaving the retorts, the gas passes through a large pipe, termed the hydraulic main, in which it deposits a part of the tar and ammonia which flow into their proper receivers, and itself goes to a vessel called the condenser.

The process of condensation first claims our attention, and on the judicious selection of apparatus for this purpose, will depend, not only the ready purification of the gas, but prevent an accumulation of offensive matter in the street mains.

The general impression appears to have been, that the only requisite to insure a perfect condensation of gas is a reduction of temperature; but it would appear from some circumstances, that more is required, and

that the process is effectually completed only by bringing the gas into contact with cold solid substances. In some of the works in Scotland, this principle is carried out to an extreme length, and their condensing apparatus is arranged so as to filter all the gas through vessels filled with "fern," "oak twigs," "stones," or any other substance, the effect of which is to separate the particles of gas from each other during their passage, and bring them in contact with the substances through which they pass. So far as observation leads to a correct opinion, it would appear that works in which a reduction of temperature alone is regarded, the condensation is but imperfectly completed; but when means are taken to bring the gas in contact with solid substances by filtration, or a constant change in the direction of the conduit, the effect is made evident by a more perfect condensation.

In works which have come under notice, the condensers are made in every variety of shape which suited the views of the constructor; without, however, in many cases, keeping in mind these principles. While it would be a useless task to describe each variety, they may be divided generally into two classes: the air, and the water condensers, or those in which the temperature is reduced by the action of the air, or by immersion in water.

The water condensers are usually either pipes immersed in water, or oblong boxes of cast iron, communicating at their ends, and extending from two to seven hundred feet in length; or in some cases, upright pipes, connected at the top and bottom, surrounded with a cast iron tank, filled with water.

The air condensers are usually a series of upright pipes, connected at the top and bottom, having vents at the lower bends for the discharge of the condensed matters, tar, &c.

The general principles upon which this part of the apparatus is to operate, being known, its form may be varied to suit the circumstances of the place in which it is to be erected; and that form which is the simplest, taking up the least space, and which costs the least money, is undoubtedly to be preferred, provided it will perform its functions with equal certainty. As the air condenser comes under all these conditions, I give it the decided preference, taking care to vary its form from the mere series of pipes, so as to increase the surface with which the gas may be brought in contact.

The first in process natural to a view of this condenser is, that during the heat of summer, the temperature of the atmosphere may be so high as to disable it from producing the desired effect; but this is not the case, for by the aid of a small stream of water, sufficient to keep the outside of the pipe moist, an evaporation takes place which reduces the temperature as low as is desired, while at all other seasons the object is gained by an exposure to the air alone.

The usual mode of construction is to erect the pipes on the north exposure, protected from the direct rays of the sun, and appears in many respects preferable to the water condenser.

The tar and other condensable substances having been deposited from the condenser into their proper receivers, the volatile products, or gases, flow to second vessels, called purifiers.

The volatile products from the distillation of coal are various in their nature and properties, being valuable for the purposes of illumination, in proportion as the pure oiliant gas and carburetted hydrogen can be separated, and preserved distinct from the other products.

To separate these valuable gases from the others, numerous plans have been put in practice successfully, but all with the same agents.

The heavy or condensable matters have all been partially disposed of; but there still remains in solution some portion of ammonia, and all the gaseous products which cannot be condensed.

To effect an entire deposition of ammonia, requires the presence of water, for which it has a strong affinity, while lime has been found the best material for depriving the gas of sulphur, the impurity held in the largest quantity, and of the most deleterious quality. The effect produced by its presence during the combustion of gas, is to send forth a suffocating odour, and to tarnish metallic polishes whenever it comes in contact with them.

Water and lime therefore being the substances best adapted to separate the impure matters from carburetted hydrogen gas, it naturally followed that a solution of lime in water was first used for the purpose of purification, and vessels on various constructions rendered subservient to this purpose, by passing the gas through the liquid, keeping the lime in solution by constant agitation, and changing the water whenever the application of gas to paper saturated with acetate of lead or nitrate of silver, was found to produce a change of colour; experience soon taught the operators that it was requisite to wash the gas in three distinct changes of water to free it entirely from its impurities.

So far as regards the economy of material only, this plan has undoubtedly the advantage, because the particles of lime, being held separately in solution, may each individually be brought into contact with the gas and be saturated with impurities; an effect which cannot be produced so perfectly when the lime is not held in solution, owing to the amalgamation of many particles together, which protect each other from the action of the gas.

This process, however, must, in some degree, prove a nuisance, from the difficulty of getting rid of so large a quantity of liquid material, impregnated with nauseous vapours.

To avoid the disagreeable effects, upon persons residing in the vicinity, by whom complaints were often made, recourse was had, in many cases, to a discharge of this refuse under ground, into neighbouring rivers or streams; but when this was deemed objectionable, extensive cess pools were resorted to, from which the liquid was gradually conveyed under the retorts and evaporated. By any mode, the discharge of this fluid is troublesome, and requires great care to prevent its becoming offensive to those residing near the works.

The disagreeable nature of this residuum led Mr. Phillips, of Exeter, to propose the purification of gas by means of dry lime, and to construct the proper apparatus for its use. The plan proposed by this gentleman, with some modifications, has obtained precedence very generally in Great Britain; and is now adopted, except in some of the larger works, which still adhere to the original plan of wet lime.

The original expense of material, by the dry lime process, may generally be considered as double that which is incurred by the wet lime process; but this cannot for a moment be considered, when placed in connection with the entire freedom from nuisance; of which the dry lime process is susceptible.

It has been said that the presence of water is necessary to absorb the ammonia. The process of Mr. Phillips was called dry lime, in contradistinction to the lime cream or wet lime plan; while, in fact, the lime is saturated with water to a consistence that would adhere, if pressed between the fingers.

In some cases, this admixture of water, together with the condensation, was deemed sufficient to free the gas from ammonia; but the process being imperfect, recourse was had to washing the gas in clear water, previous to condensation, with success. It has been found advisable to pass the nascent gas from the hydraulic main, through a reservoir of pure water, which takes up much of the ammonia that would otherwise be lost; producing a highly saturated liquor of value, and materially assisting the process of condensation.

The dry lime purifiers, consist of a series of large square boxes of sheet iron, having projections placed

on the sides, to receive sieves or wire gratings, upon which lime, slacked and moistened, is laid in strata of one to three inches thick, as lightly as possible, so as to allow the gas freely to percolate through. At the Paris works, a stratum of fern, or moss, is spread on the sieves under the lime, to assist its free circulation.

Considering therefore, that the works may, if properly arranged, be freed entirely from all offensive or disagreeable odour, by the adoption of the dry lime system, it appears to me far better to overlook the difference between the economy of the two plans, and adopt it in any works to be erected in this city.

In the construction of gasometers, many improvements have been made of late years, tending to reduce the expense and simplify their action.

The constructors have at last discovered, that as gas may be safely retained in a vessel no stronger than a silk balloon, there is no occasion for building gasometers strong enough to retain steam, and the heavy iron and wooden framings with which they were formerly encumbered, are dispensed with. No ribs or braces are now inserted, except such as are required to keep the vessel in shape until filled with gas.

The capacity of gasometers must, of course, vary with that of the works. It is not generally the custom, but I think judicious, to have nearly as much gasometer room as the retorts can fill in a day. In many instances the disadvantage, from being cramped in gas store room, I found very manifest. In the depth of winter, when the demand for gas is at its maximum, the want of an adequate supply, in store, is often severely felt; and, in some cases, resort has been had to working extra benches of retorts for the night only. The consumption of fuel during the day, to keep up the heats for night work, must necessarily be very disproportionate to the object gained.

The necessity of letting down retorts, during the suspension of public lighting upon moon-light nights, is an evil which can only be remedied by an excess of store room. Indeed, in many places, where the capacity of the gas-holder is too limited, it is found expedient to keep the public lamps lighted during moon-light nights, rather than incur the expenses of letting out and reheating retorts.

It is believed, therefore, that true economy points out the policy of a full share of store room, notwithstanding the expense is considerable, especially in a new and growing work where extensions may be looked for very soon.

The store rooms being determined, the capacity of the gasometers must approach the quantity already named of seventy-four thousand feet.

To avoid accident, it will be judicious to have this capacity divided into two vessels, which will fix the size at 50 feet diameter, by 18 feet deep, vessels well proportioned and of convenient dimension.

Gasometers of this size do not require counterbalancing, as the pressure upon the gas, to sustain the whole weight, will be less than the resistance due to a column of water three inches high, a pressure quite convenient when the weight of the gasometer is not used to regulate the flow to the burners.

The usual method now adopted to equipoise large gasometers, is to insert cast iron frames on the top of the tank, with guide rods and friction rollers to preserve a steady motion up and down, allowing the vessel to play upon the gas within.

This plan is far preferable to the old plan of suspension from the centre of the gas holder crown, which was liable to the objection of creating a flickering in the lights, whenever the vessel was agitated by external causes. Another method of suspension has lately been put in practice, which answers even better than the guide rods, for keeping the vessel steady. This is to suspend at three points, with chains tending to and terminating at one point, by a triangular frame of

wood work; to these chains connected a counterbalance is hung.

The plan of triangular suspension has one decided advantage, in a climate liable to falling or drifting snow. The weight of snow falling on one side of the vessel will not affect its perpendicular position, while, with the guide rods such an accident might affect the free play of the gas holder.

On the whole, the triangular suspension appears preferable, and the expense not much more than the guide rods, the weight required being merely sufficient to keep the gas-holder steady.

The practice of enclosing gasometers within buildings, which from their size, must entail a heavy expense on the establishment, has long since been abandoned, and they are now universally placed in the open air, even in the northern part of the island, where the climate is quite as severe, as that in which we are placed. There may perhaps be seasons in which the extreme severity of the weather will affect the water in the tank, but in general the constant supply of fresh gas at a temperature much above freezing point, will prevent any accident from impeding the free motion of the gasometer, while temporary precautions may be taken, if ordinary means should fail.

The liability to frost is the only objection which can be raised against the exposure of gas holders in the open air, and the ease with which that evil is guarded against, precludes the necessity of incurring the heavy expenses incident to the construction of buildings.

There is another advantage, however, which ought not to be overlooked; I allude to the impossibility of any serious accident occurring from the explosion of gas in vessels placed in the open air.

It has been shown on a former occasion, that the only time that a gasometer can be put in a condition liable to explosion, is during the act of expelling the air and introducing the gas in the first instance, but, that afterwards if a rent or hole be made in it, the only evil that can result, is a loss of gas; for the weight of the gasometer will cause the gas to flow out of such hole, and entirely prevent the admission of atmospheric air to create an explosive mixture within. It is clear, therefore, that if the gas escapes by accident or design, the loss in the open air is the sole evil to be apprehended as an explosive mixture cannot be formed outside of the gasometer, there being no building to confine it. The danger from explosion is an evil, the fear of which has long since passed away in all places where gas is in general use. It is there looked upon as an idle chimera.

The nature and properties of gas are now so well understood, and the precautions to prevent accident so well known, that notwithstanding the immense number of works existing at this time, a disaster is of rare occurrence, and when it does happen, the injuries are not extended as formerly, beyond the damage done to the vessel itself, where the explosion takes place.

The tanks to contain water, into which the gas-holders are inverted at some works, are cast iron plates bolted together, with a bottom of same material, but more generally of brick or stone, having the bottom well puddled before the pavement is laid, and the outside round the wall secured in the same way.

The latter method is preferable, whenever the nature of the ground will admit of such a structure, both on account of the greater economy in the construction, and because the brick being a worse conductor of heat than iron, the water is less liable to be affected by frost. In such cases it is usual to sink the tank entirely beneath the surface, thus keeping the gasometer as low as possible.\*

\* The accident which recently occurred at the Ratcliffe works, London, where the gasometer tank, (being an old brewhouse vat.) burst with the weight of water, shows us the importance of sinking the tank underground, to prevent the possibility of such a disaster.

Having disposed of the gas when made in its store-houses, we have to consider the mode of distribution to the consumers, and the regulation of the pressure, so as to insure an equal flow at the burners, points which materially affect the value of the works as a source of public convenience.

The gas is conveyed through the streets in mains or pipes of cast iron, to determine the proper size of which has heretofore been a difficult task, and one which has proved a fruitful source of error and vexation.

To avoid the heavy expense incident to laying down great mains, engineers have often erred on the other extreme, and contented themselves with pipes far too small for the wants of the public; an error which has in some cases led to a useless expense in laying mains unnecessarily large.

Unfortunately, there are even at this day, no fixed principles known respecting the flow of æriform fluids which will guide us surely in determining this point; but we must be guided by the experience of others, applying as nearly as possible their practice to our circumstances.

Before entering upon this subject, it is proper to determine the quantity of gas which will be required to pass the leading mains in a given time, and the location of the works from which the mains are to be laid.

The first reply as to the quantity of gas required, must be a mere assumption, for no one can prophesy the extent of the demand.

In Great Britain, it has, in growing towns, almost invariably exceeded the most sanguine calculations, and we are not likely to be behindhand in appreciating an improvement, when the value is once understood.

I cannot assume, however, a demand of less than twenty thousand lights, including public and private; suppose for the eastern front of the city, fourteen thousand, and for the western front six thousand, consuming an average of four feet per hour.

To supply the eastern front, (dispensing with gasometer stations,) will require to be passed in one hour

14,000+4, equal to	56,000 feet.
Western front, 6,000+4, equal to	24,000

Total consumption in one hour in cubic feet,	80,000
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In estimating the size of the mains, it is requisite to know the location of the works; because, if they are to be placed on the eastern front, either above or below the city, it is clear that the mains must be of a capacity sufficient to pass the whole quantity within the city limits; but if the location formerly selected be still adhered to, on the western front, then the part of the city between the works and Broad street, may be supplied direct from the works, while the main need only be of a capacity to pass that portion required for the eastern front.

By this means, Broad street will be the point from which the draught on the main will commence, and to which the pipe must be of sufficient capacity to convey the whole quantity required as fast as it is consumed on the eastern front of the city.

By ascertaining the delivery of gas through mains, in such cases as I have been able to make observation, I have found one instance of a six inch main, extending the same distance, in which a pressure of six-tenths of an inch was ample to deliver the gas at a velocity of ten feet per second. Taking into consideration the difference of friction in a pipe of such dimension, and in one, the capacity of which will be sufficient for our purpose, we may feel quite safe in laying a main which will pass the required quantity at the same velocity, or even something less. The discharge through the main alluded to, being seven thousand feet per hour at that pressure, or one-eighth the quantity stated before, the



main, according to this rule, must be eight times the capacity, or seventeen inches diameter; but as the rubbing surface, or area, in proportion to the quantity passed, is so much less in the latter than in the former, I should not hesitate to reduce the size to fifteen inches diameter, believing that the proportional diminution will be compensated for by the difference in the friction.

In this I am confirmed by reference to another instance, where 23,000 feet per hour are passed five sixths of the distance through a main ten inches in diameter, which would give the size required to pass 56,000 feet per hour, by the same rule, 15½ inches diameter; this example shows a decrease of friction in greater ratio than in the length of the pipe.

Whether this main of so large dimension should be laid at once, or divided into two, of half the capacity each, may be hereafter determined, when the plan of distribution comes under final consideration; it is sufficient for our present purpose to know the whole size which will be required.

The capacity of this main has been considered, without reference to any assistant station for storing gas or regulating pressure.

It will be recollected that, on a former occasion, the committee of councils deemed it necessary to appropriate a station on the eastern front for this purpose, and designated the public lot in Dock street as a suitable position. In doing this, they certainly acted with sound judgment, believing that the regulating station there, would have great effect in preserving an equal flow of gas from the burners in all parts of the city; and it is quite possible that a resort to a regulating station on the eastern front may, in the event, be found not only useful, but necessary. As however, there seemed to be a strong objection among many citizens to such a disposition of that lot, I took some pains, by comparing the situation of this city with others, to ascertain whether the descent from Broad street was likely to affect the flow to such a degree as to render an easy regulation impracticable, and now feel satisfied, that if the mains are of ample size, no difficulty will arise in distributing from works on the Schuylkill, without any auxiliary stations whatever.

If experience shall testify to the correctness of this opinion, a very heavy expense in stations will be saved. It is possible that a difficulty may occur on the eastern wharves, which being the lowest point, may be affected by unusual draughts from above. The only evil to be apprehended is, that as there will be an excess of pressure on the upper burners of 4-10ths of an inch over those on the lower level, the size of the apertures in the burners will require to be varied, to meet the difference in the rapidity of flow; an inconvenience of no great moment, as it will affect principally the burners below Front street, where more than half the depression takes place.

It is not, therefore, deemed expedient to take any measures to provide for the regulation of pressure beyond what may be accomplished at the manufactory, until experience proves the necessity.

The mode adopted in some works, for regulating the flow of the burners, is by taking off, or adding to the weight which counterbalances the gasometer. But this is a clumsy and laborious plan, one likely to prove defective, unless the gas-holder is nicely poised with compensating weights. Instead of this arrangement, the conical valve has been substituted, which, by being closed or opened, regulates the quantity of gas flowing from the gas-holder through the exit pipe, by changing the size of the opening.

This valve is sometimes opened by hand, but its regulation by the judgment of the workmen, does not in all cases answer the desired end, for if a number of lights are suddenly extinguished; the additional pressure on the pipes causes an excess of flow, through all the remaining burners; thus, although long experience

enables the workmen to regulate with tolerable certainty, yet errors and loss of gas will constantly happen.

To remedy this evil, a self-acting governor has been put into use, which consists of a small gasometer, to which is attached the stem of the conical valve. This gasometer is counterbalanced to the weight required to force the gas to all the burners. Any change in the consumption of the gas, operates at once to raise or depress this gasometer, and of course regulates the flow by closing or opening the conical valve. Thus with a self-acting governor, the flow and pressure upon the mains is regulated with great nicety to the exigencies of the moment, requiring only that there shall be more weight upon the main gas-holder than upon the smaller one.

The plan for laying pipes as usually practised, is perfectly well understood here, differing from water pipes only in one particular, that is, a regular grade of elevation and depression must be preserved, in order to give a descent for the flow of condensed water, (which sometimes accumulates in the pipes,) to certain points where it may be received into suitable receptacles, and removed, otherwise an obstruction in the flow of gas might occur.

These recipients are called syphons, or more properly condensed water boxes, and are to be provided at every point of depression.

The mains require to be laid out of reach of the frost; in this climate from eighteen to twenty-four inches below the surface. They are usually laid on each side of wide streets, or if narrow, one row in the middle is ample, the openings or trenches being made and closed on the same day, so that the passage of the street is never materially impeded to the inconvenience of travellers; so slight a trench being made, that the earth is easily rammed in and the pavement relaid without waiting for the natural settlement of the earth.

A method has been partially adopted lately, which I think far superior to the old mode, in all cases, where the pipes are laid over solid ground. By this plan the hubb of the pipe is bored, and the small end turned each with a very slight taper. The two ends of the pipe being covered with a mixture of white and red lead, are entered, the small end into the hubb, and driven home with a mallet. The joint thus made is perfectly tight, and the taper so slight, that no contraction by change of temperature will render them subject to leak. It is plain that this mode of making joints can only be carried into effect in straight lines, or with slight curvatures, in all other cases the old plan of lead joints must be resorted to.

Where the lines are straight as in this city, great facility is presented for using the bored and turned joints, which are undoubtedly preferable to lead joints wherever they can be introduced.

The service pipes from the street main to private meters are sometimes made of small cast-iron tube of three-fourths or one inch diameter, but more generally of malleable iron or lead. The use of malleable iron for this purpose has been almost universal, but it has been found, that whenever it comes in contact with ashes, gravel or sand, it is acted upon and destroyed in ten or twelve years, while in clay no such difficulty is experienced.

The extreme ductility of lead, which is often used, renders it objectionable; being liable to short bends, in which water may lodge, and obstruct the flow of gas. To obviate this, lead pipe is sometimes laid in grooved brick, which effectually overcomes the evil, while the expense is enhanced beyond that of iron pipe.

For internal tubing, lead or tin is often substituted in place of copper, of which metal the small tubes were formerly almost universally made.

It has been found that the hard solder joints of the copper tubes were apt to crack in the bending, the cracks being almost imperceptible, but still sufficient to

cause an escape of gas, and an unpleasant smell. The tin or lead, being too ductile to crack, answers the purpose exceedingly well, in all places where the pipes can be supported in a straight line. The apparatus for internal fittings, burners, &c. are as various as the taste of the maker or consumer may desire. Samples and drawings of most of those made at Birmingham are in my possession; together with the prices of every article appertaining thereto.

After thus taking a view of the most approved process of manufacturing gas, and plan of distribution, there remain several points, to which, by the instructions, my attention has been directed; among the most prominent is the nature and disposition of the residuums left from the carbonization of coal.

The only residuums which will be available, are the coke, the ammoniacal liquor, and the tar.

For the coke, there is no doubt, an ample market will be found. The high price of charcoal, for which it is a substitute of value, both for the use of foundries and for culinary purposes, ensures for it a ready sale; the price bearing a proportion to the cost of the coal from which it is produced.

The ammoniacal liquor is useful for the manufacture of salamoniac, and sells for a small price in Baltimore, where there is a manufactory of that article. The produce of a chaldron of coal is from 20 to 30 gallons, but need not be considered of much value here for some years, or until a sufficient quantity is produced to make it worth manufacturing; for the cost of transportation to Baltimore would make that market of little avail to the works in this city.

The last residuum is the tar, which, in many ways, is of value.

It will sell, in its raw state, for a fair price; but when the quantity is considerable, a good profit may be derived from it, by extracting the naphtha, now an article used to some extent in the manufacture of gum elastic; which leaves after distillation, about half its bulk of concentrated tar, more valuable than in its original state.—Of the process of manufacturing the naphtha, I have obtained a description. Under all circumstances, it is extremely valuable as a fuel for heating the retorts.—Three gallons being estimated, for that purpose, equal to a bushel of coke.

The consumption of tar as fuel, in connection with an equal quantity of water, is practised in some works; and the advantages derived from this combination being doubted, have elicited much spirited controversy during the past summer; to this plan my attention was called, during a visit to Mr. Rutter, the inventor, at Lymington. It is the usual custom, in most gas works not situated convenient to a market for tar, to consume their product, by conveying it through a tube upon the red hot bed of fuel on the grate bars. This process, from the quantity of smoke discharged, and the deposit of solid matter on the other fuel, gave clear evidence of the imperfection of its combustion, and that but a small quantity was made available for the purpose of heating the retorts.

To give the burning tar, in which the carbon is in excess, its due proportion of hydrogen for the production of flame, and oxygen for its support, Mr. Rutter introduced a portion of water, by the decomposition of which, a complete combustion of the tar was effected, and the whole of its heating properties made available.

Without taking any part in this controversy, I may be permitted to say, that in no works in the kingdom, which came under notice, was there any thing like so perfect a combustion of the tar, as in those where this process was used, and I had a fair opportunity of comparing the economy of the heating process with and without its use, in the same works, which gave decided evidence of the saving effected by the plan of Mr. Rutter.

The prices at which the residuums are sold, being dependent entirely on local circumstances, vary so

much, that no useful purpose would be accomplished by detailing them. In some works, the price of coke is fixed from time to time, to cover the price of the coal used to make it, and the other residuums considered of no value for sale. In others, on the contrary, the coke is quite unsaleable, and consumed as the only means of getting rid of it. At some works, too, the refuse lime is sold for prime cost, as manure, being considered, from its strong impregnation with ammonia, as being improved in quality for that purpose; in other places, where lime is not valued as manure, this product is but refuse.

For the value of these residuums, we must refer to our own circumstances, and are justified in saying, that the ammoniacal liquor will be of little moment for some time to come, but that the lime, tar and coke, will produce valuable results; indeed, for the latter, an offer has already been made for more than the works will supply.

In disposing of the gas when made, two modes are adopted: the one by meter or measure; the other by jet or burner.

The latter method is open to extensive frauds, and the effects have been severely felt by those companies who have been unable to change the system. The quantity of gas which will flow through the aperture of a given burner, to produce a flame of a given height, being ascertained by experiment, and also the aggregate number of hours during a year for which light is required, a contract between the parties is made, and the jet furnished.

If the consumers would all adhere to their contract, and if the pressure in all parts of the town was uniform, no difficulty would arise; but whenever a customer raises the flame higher than his contract admits, or burns more hours than his agreement, he not only defrauds the manufacturer, but injures all customers who do not take such advantages; because, the manufacturer, to obtain the cost of his gas and his profit, must enhance the nominal price per thousand, requiring the honest customer to pay the same as he who consumes twice as much as he is entitled to; the correct customer is then for paying for light surreptitiously obtained by his neighbor.

The evils of this system are so severely felt, that some companies do not receive more than one half the value of their gas, taken at its sale price, which they are obliged to keep up, to the cost and disadvantage of the honest consumers.

To avoid this evil, an ingenious mode of measuring gas was contrived in the early stages of the art; which, though liable to some objections, has been gradually improved, until, at this time, all difficulties are in the main obviated. This instrument is called the gas-meter; and consists of a hollow metal drum, revolving in an air tight case, filled to a certain point with water; this drum is divided into four compartments, each having two openings, one for the exit, the other for the entrance of the gas. As this drum revolves, one division fills with gas as the opening ascends out of the water; while, at the same moment, the opposite division descends, and gas is forced, by the water, out of the opening to the burner.

The cubic contents of each division being accurately measured, it is clear that the quantity of gas contained in the drum, and which passes out during one revolution, must be known. This revolving drum acts upon wheel-work, attached to indicators, which point, on a watch dial, the number of revolutions, and of course, the number of cubic feet that have passed through the meter during the time it has been operating.

The meters are usually examined every three months, and the gas used during that time ascertained. The more completely to exemplify the action of this instrument, I have obtained, through the politeness of Mr. Crosley, the maker, a model in glass, which is now on

its way from London; by an examination of this model its construction will be more perfectly understood.

It will be seen that the accuracy of this measurement depends upon the position of the water-line, which must be kept at a uniform height. From want of attention to this circumstance, errors will occur; but the internal arrangements are such, that an error cannot extend far without discovery, in no case exceeding five per cent, and that in favour of the consumer.

The greatest obstacle to the success of the meters, has been the decomposition of the material composing the internal drum, by the action of the gas, or some of its impurities, while stationary. I have seen meter drums, made of sheet-iron, corroded into holes in five years; which, until discovered, recorded false measurements.

After countless experiments, Messrs. Crosleys of London, have discovered an alloy, which is not acted upon by any product evolved from coal, and the use of this composition appears to render the meter an instrument of such accuracy, that it may be depended upon, and should be universally adopted.

Another instrument has been invented in this country, called a dry meter, because it is used without water, which would be an advantage, all other things being equal. This instrument I have not seen, and of course can give no opinion as to its merits.

The price at which gas is sold, in Great Britain, varies rather with the amount of competition and cost of production, than with any reference to the expense of lighting by other means.

The gas companies appear to be in far greater dread of rival establishments, than from oil or candles.—Indeed the latter does not, at this late period, give them a moment's thought; for so many advantages are found to accrue from the use of gas, in all situations where fixed lights are admissible, that little impression would be made on the sale of it, even if the price of other light were reduced below that of gas.

In Scotland, where greater attention has been paid to the quality of the gas, it is now the usual light in private houses, as well as in more public situations. The best houses in Edinburgh are thus served, and the consumption of gas is fast increasing.

The extension of gas-lights in private houses, is not so much the result of its cheapness as a material for lighting, but on account of its cleanliness, its safety, and saving of labour; and contrivances are constantly being made to obviate the inconvenience of having stationary lights, the only obstacle to its universal introduction.

In England, it has heretofore been confined in the main, to public streets and buildings, shops, churches, &c.; but its use, in private houses, has begun to spread rapidly, as more care is taken in the purification. In London especially, its introduction into private houses has been very limited, for the companies have rather retarded than urged its adoption, finding more profitable consumers elsewhere, who kept pace with their means of supply.

Within a short period, the price of gas has been very materially reduced, varying now from eight to twelve shillings per thousand feet, with a scale of discounts for large consumers by meter, proportioned to the quantity used in the year.

To compare the cost of lighting by gas and oil might be difficult, upon satisfactory data, because the comparisons at the works there, have been made universally with candles. The fine sperm oil of our market, is comparatively little used in England, and sells by retail at from 6s. to 6s. 6d. the gallon. For public lighting, (where gas cannot be had,) Greenland, or other common oils are used, which sell by wholesale at 1s. 9d. to 2s. 3d. per gallon, or an average of fifty cents. This is the imperial gallon, which contains one-fifth more than the wine gallon used here for the same measures. This

oil retails at 2s. 6d. to 2s. 9d. per gallon, and is used for common purposes of lighting. The greater consumption, (excepting gas,) is in candles of various kinds.

In my endeavors to procure a comparison between the cost of lighting by the two systems, I was fortunate in procuring such a statement as may be considered satisfactory, inasmuch as it is the result of a series of experiments made to show the difference between the illuminating power of gas, made in different parts of England, referring each to a candle as the standard of comparison. The result being given during the last summer, in evidence before a committee of parliament, on the application of an oil gas company to change their works for the manufacture of coal gas.

This statement may therefore be taken as authentic, and referred to our own case.

The results being an average of the quantity of gas made in ten manufactories, which by comparison of shadows was found to be equivalent to one hundred pounds of mould tallow candles, (burned clear,) of six to the pound, nine inches long, was twenty-four hundred and seventy-seven feet.

Say 2477 at \$3 per thousand, (here,)	7 43
100 pounds of candles, at \$10 50, cost	10 50

Difference in favor of gas,	\$3 07
or near thirty per cent. This is the saving, under the supposition that the candle is all consumed or made available, and always gives the same clear light.	

The prices here stated are the retail prices; but it must be remembered that the gas is measured out to the consumer, and burned as fast as it is measured; consequently he receives the benefit of all that he pays for, leaving the loss to fall upon the manufacturer, of all leakage between the works and place of consumption; while, on the contrary, the loss and waste incident to the consumption of candles, fall upon the consumer, and cannot be estimated at less than fifteen per cent.

Again, during all the period of burning gas, a clear, undiminished light is produced, while any light having a solid material for a wick, must diminish in brilliancy the longer it continues to burn.

Taking into view all circumstances, it must be admitted that the use of gas possesses advantages which can belong to no other means of illumination.

It may here be proper to give some general idea of the amount of capital required to carry into execution the works as here described, which, for reasons already given, must be mere approximations:

The works, as before stated, will not exceed \$35,000

Considering for the moment, that the works will be located on the Schuylkill, north of the Permanent Bridge, and that the leading main will be divided in two, having the aggregate capacity of a main of 15 inches diameter, one now laid will cost 20,000

Pipes for distribution, in all, five miles, say 3 miles of 6 inch, at \$3 25 per yard,	11,444
Three miles of 3 inch, at \$1 80 per yard,	9,504

\$75 948

If to this sum be added the expense incident to walling, levelling, and wharfing the lot, construction of public lamp posts and lamps, with a floating capital necessary to keep up the supply of gas, we may consider that a capital of one hundred thousand dollars is quite ample for the works, as here described. As this sum will include the expenses incurred by enclosing the property, laying one half the great main, and a considerable proportion of the larger pipes of distribution, we may safely conclude, that the second division of the works will not cost more than two-thirds this amount.

In conclusion, I beg leave to suggest, as the result of my examinations on this subject,

First. That all information which has come into my possession, either in Europe or in this country, has tended to confirm the opinion that the proposed system of lighting by "Gas" will be found preferable to any other, as regards economy, safety, and convenience.

Second. That a "gas" manufactory judiciously constructed, and managed with skill and economy, cannot fail to return a handsome profit to its constructors.

Third. That the art of gas-making has so far advanced at this day, as to place within our reach, such information as will enable this city to entertain the measure with a feeling of perfect security as to the result.

Fourth. That the objections to the measure, and fears expressed by many valued citizens on a former occasion, are either totally groundless, or very easily obviated, and that the effects which will be produced by a judicious execution of the measure, will be beneficial, both in a moral and pecuniary point of view.

Fifth. That the improvements made within a few years, render it an easy task so to construct the works as to avoid all danger from explosions, or inconvenience from the offensive nature of the process, or residual matter connected with the manufacture of gas.

Sixth. That the works be constructed upon a moderate scale, commensurate with the immediate wants of the city, and made complete, but that land sufficient for the increase of the works should be appropriated for their extension, to satisfy the demands in all parts of the city, and that the mains or pipes be laid of such capacity as to ensure their aptitude for any future demand.

All which is respectfully submitted.

S. V. MERRICK.

December 11, 1834.

#### RATES OF TOLL

To be charged on the Pennsylvania Canal, from and after the first day of February, 1835.

ARTICLES.	Toll per mile.
Agricultural implements, carts, wagons, s'leighs, ploughs and mechanics tools, necessary for the owner's individual use, if accompanied by the owner emigrating,	c. m.
Agricultural productions not specified,	per 1000 lbs 0 7
Ale and Porter in Barrels,	do 0 6
Apples, Peaches, and other green fruit,	do 0 5
Ashes, leached,	do 0 2
do pot and pearl,	do 0 6
Bacon, Barley,	do 0 6
Bark unground,	per cord 1 0
Bark ground,	per 1000 lbs. 0 6
Beef salted, Beer,	do 0 6
Boards, plank, scantling, and all other sawed timber or stuff calculated at inch measure, except such as is enumerated below, in No. 56 and No. 115, if conveyed in boats or scows,	1000 ft. b'rd ms. 0 7
Do if conveyed in rafts	do 2 0
Bran and ship stuff,	per 1000 lbs. 0 5
Bricks,	do 0 3½
Buckwheat, Butter,	do 0 6
Burrs, French in bucks,	do 0 7
Charcoal,	do 0 5
Cheese,	do 0 6
Cider,	do 0 5
Clay, earth, sand and gravel,	do 0 2
Coal mineral,	do 0 2½

ARTICLES.	Toll per mile.
Coke,	per 1000 lbs. 0 3
Copper in sheets and manufactured,	do 1 2
Corn, Indian,	do 0 6
Cotton,	do 0 5
Deer, Buffalo and Moose skins,	do 0 7
Drugs and Medicines,	do 1 2
Dry Goods,	do 1 2
Earthen Ware,	do 0 5
Feathers, Fish, salted or fresh,	do 0 6
Flour,	do 0 5
Furniture, household,	do 1 0
Furs, and peltry, except Deer, Buffalo, and Moose skins,	do 1 2
Glass ware,	do 1 0
Grind stones,	do 0 7
Groceries,	do 1 2
Gypsum,	do 0 7
Hardware and Cutlery,	do 1 0
Hay,	do 0 3
Heading and Bolts for Cedar ware,	do 0 4
Heading and Hoop Poles for barrels and hogsheds, if conveyed in boats or scows,	do 0 3
Do do if transported in rafts	do 0 6
Hemp and Hempen yarns,	do 0 5
Hides, raw, of domestic animals,	do 0 8
Hops,	do 0 6
Iron Ore,	do 0 3
do Scraps, Pigs and broken castings,	do 0 4½
do Castings, Blooms and Anthonies,	do 0 8
do Bar, rolled, slit or hammered	do 1 0
Lard,	do 0 6
Laths sawed of less than 5 ft. in length and split laths,	do 0 3
Lead, bar and pig,	do 0 5
do White, Red and Litharge,	do 1 2
Leather, dressed and undressed,	do 1 2
Lime,	do 0 3½
Limestone,	do 0 2
Liquors, foreign,	do 1 2
Live stock,	do 0 6
Mahogany wood,	do 1 0
Manure,	do 0 2
Marble, in blocks,	do 0 3
do sawed,	do 0 5
do manufactured,	do 1 0
Mill stones,	do 0 7
Nails and Spikes,	do 1 0
Oats,	do 0 6
Oil of all kinds, Oysters,	do 1 0
Paints and dye-stuffs,	do 1 0
Paper,	do 1 2
Pork, salted or fresh,	do 0 6
Posts, split or round for fencing, if carried in boats or scows,	per hundred, 0 6
do if conveyed on rafts,	do 1 2
Potatoes, turnips and other vegetables,	per 1000 lbs. 0 5
Queens-ware and China-ware,	do 1 0
Rags,	do 0 7
Rails, split for fencing, if carried in boats or scows,	per hundred 0 4
do if conveyed on rafts,	do 0 8
Ropes and Cordage,	per 1000 lbs. 1 2
Rosin,	do 0 9
Rye,	do 0 6
Salt,	do 0 5
Seed, Clover, Timothy, Flax and other kinds of	do 0 6
Shingles, long, if conveyed in boats or scows,	per thousand, 0 3
do do if conveyed on rafts,	do 0 8
do short, if conveyed in boats or scows,	do 0 2

ARTICLES.	Toll per mile.	c. m.
Shingles, short, if conveyed in boats or scows,	per thousand,	0 2
do Cedar, if conveyed in boats or scows,	do	0 4
Slate for roofing,	per 1000 lbs.	0 5
Staves for Pipes, Hogsheds and Barrels, if conveyed in boats or scows,	do	0 3
the same, if conveyed on rafts,	do	0 6
do Cedar, if conveyed in boats or scows,	do	0 4
Steam Engines, steel,	do	1 2
Stone, entirely unwrought,	do	0 2
do wrought,	do	0 4
Stone, Soap,	do	0 5
Stone Ware,	do	0 7
Straw,	do	0 3
Tallow,	do	0 6
Tar,	do	0 9
Tile,	do	0 5
Timber, round and square, if conveyed in boats or scows,	per 100 cubic ft.	0 7
do if conveyed on rafts,	do	2 0
Tin and tin ware,	per 1000 lbs.	1 2
Tobacco manufactured,	do	1 2
do not manufactured,	do	0 5
Wheat,	do	0 6
Whiskey and other Domestic Liquors,	do	0 7
Window blinds, sawed stuff for, not exceeding $\frac{1}{4}$ of an inch in thickness,	do	0 6
Window Glass,	do	0 9
Wood for fuel, if conveyed in boats or scows,	per cord	1 0
do if conveyed on rafts,	do	2 0
Wool,	per 1000 lbs	0 6
On all articles not enumerated, passing Southward or Eastward	do	0 7
On all articles not enumerated, passing Northward and Westward,	do	1 2
On all boats and other vessels used chiefly for the transportation of property,	per mile	3 0
On all boats and other vessels made and used chiefly for the transportation of persons,	do	10 0
On each person over 12 years of age transported in a boat used chiefly for the transportation of property,	do	0 5
On each person over 12 years of age, transported in a boat used chiefly for the transportation of persons,	do	0 7 $\frac{1}{2}$

*No toll shall be charged for the baggage of any passenger when the weight of the same does not exceed fifty pounds.*

#### OUT-LET LIFT LOCKS.

*The following Toll shall be charged on Boats, Arks, Rafts and other Craft, passing through Out-Let Lift Locks connecting with rivers. For each such passage.*

For every loaded ark, Durham or river Boat, and Craft, not built expressly for navigating the Canal, for passing a double lock,	75 cts
For either of the same passing a single lock,	50
For do do if empty passing a double lock,	37 $\frac{1}{2}$
For do do if empty passing a single lock,	25
For each raft of Lumber,	75
For each boat navigating the Union, and not the Pennsylvania Canal, passing the out-let locks at Portsmouth,	35
<i>Provided, That no Boat, Raft or other Craft, shall be charged for passing the tide lock at Bristol, while the same remains open by the operations of the tide: And provided also, that all Boats, navigating the Lehigh Coal and Navigation Company's Canal, and likewise "all</i>	

*river Boats or Arks owned by any person residing on the Lehigh River, shall be entitled to pass the out-let lock at Easton, either going into the river Delaware, or returning therefrom, without toll or charge for such passage.*

Any Boat, Ark or other craft, which may have descended a River running parallel with any portion of the Pennsylvania Canal, and which, on its return voyage, enters and passes upon the said canal, shall pay, in addition to the toll already established, **THIRTY CENTS** per mile, for every mile such Boat, Ark or other Craft may navigate the Canal.

Every Float lying in, or occupying any public Basin connected with the Canal, except while receiving or discharging its cargo, (for which purpose 48 hours are allowed if necessary) shall be charged 25 cents a day for each and every day such Boat shall remain therein.

**WEIGH LOCKS.**—For weighing each Boat or other vessel not navigating the Pennsylvania Canal, 50 cts.

#### RATES OF TOLL.

*To be charged on the Philadelphia and Columbia, and Allegheny Portage Rail ways, from and after the first day of February, 1835.*

ARTICLES.	Toll per mile.	c. m.
Agricultural implements, carts, wagons, sleighs, ploughs and mechanics tools, necessary for the owner's individual use, when accompanied by the owner emigrating,	per 1000 lbs.	1 0
Agricultural productions not particularly specified,	do	0 8
Ale and Porter in barrels,	do	0 8
Apples, Peaches, and other green fruit,	do	0 8
Ashes, leached,	do	0 3
Do. Pot and Pearl, Bacon, Barley,	do	0 8
Bark unground,	do	0 7
Bark ground, Beef salted, Beer,	do	0 8
Boards, Plank, Scantling, and all other sawed timber,	do	0 7
Bran and Ship stuff,	do	0 7
Bricks,	do	0 6
Buckwheat, Butter,	do	0 8
Burrs, French in blocks,	do	1 0
Charcoal, Cheese,	do	0 8
Cider,	do	0 7
Clay, Earth, Sand and Gravel, Coal Mineral,	do	0 3
Coke,	do	0 4
Copper in Sheets and Manufactured,	do	1 6
Corn, Indian, Cotton,	do	0 8
Deer, Buffalo and Moose Skins,	do	1 0
Drugs and Medicines, Dry Goods,	do	2 0
Earthen-ware, Feathers, Fish, salted or fresh, Flour,	do	0 8
Furniture, household,	do	1 4
Furs and Peltry, except Deer, Buffalo and Moose skins,	do	2 0
Glass Ware, Groceries,	do	1 6
Grind Stones,	do	1 0
Gypsum,	do	0 8
Hardware and Cutlery,	do	1 6
Hay,	do	0 5
Heading and Bolts for Cedar Ware, Heading and Hoop Poles for Barrels and Hogsheds,	do	0 5
Hemp and Hempen Yarns, Hops,	do	0 8
Hides, raw, of domestic animals,	do	1 4
Iron Ore,	do	0 5
Do Scraps, Pigs and broken Castings,	do	0 7
Do Castings, Blooms and Anchovies,	do	1 0
Do Bar, Rolled, Split or Hammered, Laths sawed of less than 5 feet in length and split laths,	do	1 4
	do	0 5

## ARTICLES.

	Toll per mile.	
	c.	m.
Lead, Bar and Pig, Lard,	do	0 8
Do White, Red and Litharge,	do	1 6
Leather, dressed and undressed,	do	1 6
Lime,	do	0 5
Limestone,	do	0 3
Liquors, Foreign,	do	1 6
Live Stock,	do	0 8
Mahogany Wood,	do	1 4
Manure,	do	0 3
Marble, in blocks	do	0 5
Do sawed,	do	0 7
Do manufactured,	do	1 4
Mill Stones,	do	1 0
Nails and Spikes,	do	1 4
Oats,	do	0 8
Oil of all kinds, Oysters, Paints and		
Dye-stuffs, Paper,	do	1 4
Pork, salted or fresh,	do	0 8
Posts, split or round for fencing,	do	0 5
Potatoes, turnips and other vegeta-		
bles,	do	0 6
Queens-ware and China-ware,	do	1 6
Rags,	do	1 0
Rails, split for fencing,	do	0 5
Ropes and Cordage	do	1 6
Rosin,	do	1 4
Rye,	do	0 8
Salt, passing eastward,	do	0 5
Do passing westward,	do	1 0
Seed, Clover, Timothy, Flax and		
other kinds of,	do	0 8
Shingles,	do	0 7
Slate for roofing,	do	0 8
Staves for Pipes, Hogsheds and		
Barrels,	do	0 5
Staves, Cedar,	do	0 7
Steam Engines,	do	1 6
Steel,	do	2 0
Stone, entirely unwroughtf	do	0 3
Do wrought	do	0 6
Stone, Soap,	do	0 8
Stone Ware,	do	1 0
Straw,	do	0 5
Tallow,	do	0 8
Tar,	do	1 4
Timber, round and square,	do	0 5
Tin and Tin Ware,	do	1 6
Tobacco manufactured,	do	1 6
Do not manufactured, Wheat,	do	0 8
Whiskey and other Domestic Liquors,	do	1 0
Window Glass,	do	1 4
Wood for Fuel,	do	0 5
Wool,	do	0 8
On all articles not enumerated, pass-		
ing eastward,	do	1 0
On all articles not enumerated, pass-		
ing westward,	do	2 0
On the United States Mail, for every		
ten pounds,	per mile,	0 1
On each Burden Car,	do	1 0
On each Passenger Car,	do	2 0
On each Baggage Car,	do	2 0
On each passenger over 12 years of		
age, transported in a Car, of any		
description,	do	1 0
On each passenger between 6 and		
12 years of age,	do	0 5
Fifty pounds of baggage will be allowed to each pas-		
senger, free of charge. All extra baggage shall be		
charged at the rate of one mill per mile, for every		
twenty pounds.		

**VIADUCTS.**—For crossing the Schuylkill Viaduct, the same rates of toll as are now, or may be charged for crossing the Permanent Bridge, over the River Schuylkill, at Philadelphia.

Any person passing over a bridge or viaduct on the Rail way, where toll is or may be chargeable, who shall refuse to pay such toll to the Collector, when demanded, shall pay a fine of five dollars, for each and every such offence.

## WEIGHT OF ARTICLES.

*In the collection of TOLL, all articles are to be charged at their exact weight—but when not weighed, the annexed articles are to be computed as follows:*

Ashes, pot and pearl,	per barrel,	320 lbs.
Beef, salted,	do	220
Brick,	per 1000	4500
Barley,	per bushel	45
Buckwheat,	do	45
Corn,	do	56
Flour,	per barrel	212
Fish, salted,	do	300
Heading for barrels,	per 1000	4500
Do for hogsheds,	do	5600
Hoop poles for barrels,	do	5600
Do for hogsheds,	do	11200
Lime,	per bushel	80
Limestone, per perch of 25 cubic feet,		4000
Liquors of all kinds,	per barrel	300
Oil of all kinds,	do	280
Oats,	per bushel	30
Oysters,	do	75
Pork, salted,	per barrel	280
Rosin,	do	280
Rye,	per bushel	56
Seed clover, and all other kinds,		56
Staves per pipes,	per 1000	5600
Do for hogsheds,	do	4500
Do for barrels,	do	3750
Stone unwrought, per perch of 25 cubic feet,		3750
Tar,	per barrel of 28 gallons	320
Wheat,	per bushel	60

The foregoing Rates of Toll, to take effect and be in force, from and after the 1st day of February, A. D. 1835.

JAMES CLARKE,  
JOHN MITCHELL,  
ROBERT M'COY,  
Canal Commissioners.

Attest,  
FRS. R. SHUNK, Secretary.

## THE SCHUYLKILL NAVIGATION COMPANY.

Report of the President and Managers of The Schuylkill Navigation Company, to the Stockholders.—January 5, 1835.

In presenting their annual Report, the President and Managers have the pleasure again to congratulate the Stockholders upon the prosperous state of the Company's affairs.

At the meeting held at the beginning of the year just ended, their anticipations of business and income were clouded by the general derangement of the currency of the nation, and the consequent inactivity of every description of trade, as well as by the oversupply of coal in the preceding year, which had left a large stock on hand. The influence of these causes was felt very seriously in the first half year; but a great improvement it will be perceived, took place in the second, the apprehension of a scarcity of coal, from the short supply in the early part of the season having produced an increased demand for the article, and, as a consequence, a renewed activity in the trade. The total product falls somewhat short of that of the preceding year; but the trade and income for the second half year, beginning from the first Monday of August last, are greater than for the corresponding period of 1833. The aggregate for the whole season of navigation exceeded what was expected.

The new works at Reading having been put into operation so as to supply the place of the former works near that town, a great and constant source of vexation and delay, as well as of uneasiness and alarm, has been effectually closed up.

By means of this, and of other economical arrangements adopted at various points by the Board, the expenses of the Company have been very much diminished; and hence, though the income has been less, the two semi-annual dividends will together be nearly equal to the next preceding ones.

The improvement of the whole line of the works has made it practicable to employ much larger boats than formerly; and the double locks have so accelerated the passage of boats as very much to lessen the time required for making their voyages. Instead of boats averaging thirty to thirty-five tons, and consuming in the descent and return from twelve to fourteen days, the last year's average was not less than forty-five tons per boat, many of them carrying upwards of fifty tons, and the time occupied was only from seven to nine days.

The importance of the Reservoir on Tumbling run has been fully proved during the latter part of the summer and fall. From the 25th of August to the 15th of November, with the exception of about a week, when there was aid from a slight fall of rain, the boats were enabled to carry their usual full loads only by means of a supply of water from the reservoir.

In all the experience of the Board, so dry a season has never been known, and but for the supply from the reservoir the business of the navigation must have been much diminished above the mountain, and materially affected below it; for though the water did not cease to run over the dam at Fair Mount, and many other of the dams, it is scarcely to be doubted that such would not have been the case but for the assistance from the water from the reservoir.

In a former communication the Board stated that they had secured ground for an additional reservoir. — They are of opinion that it should be constructed without delay, for which purpose a survey has been already made, and a draft of the one projected, as well as of the one in operation, is submitted to the Stockholders, together with a report of the Company's Engineer, Edward H. Gill, a gentleman in whom the Board repose great confidence.

The present reservoir contains nine hundred thousand cubic yards. The new one will hold a larger quantity, supplying together about one million nine hundred and fifty thousand cubic yards of water.

Agreeably to the anticipation of the Board, the two new locks at the Vincent canal went into operation on the 4th of July last. The Board would then have suspended their operations until they could have obtained new directions from the Stockholders, as the funds appropriated for doubling the locks were more than exhausted; but on examination of the old locks at Kernsville, it was deemed unsafe to depend upon them for another season without extensive repairs, which could only be made to advantage in the summer, and this would have had the effect of delaying the trade for a considerable time. It was therefore deemed indispensable to construct immediately the additional lock contemplated at that place. The work was accordingly begun, and it will be ready to go into operation on the opening of the navigation in the spring.

Another point of equal importance, and requiring early attention, was the lock at the outlet of the Girard canal, near to which a considerable slip from a hill had happened in 1824, and filled the canal; since which time, until recently, there seemed to be no further danger, but another inclination to move has been lately observed, which threatens a dangerous obstruction, and it was deemed best, without delay, to construct an additional lock about eight hundred feet above the old one, and entirely out of reach of such a formidable ac-

cident. This has been commenced, and will be ready early in the spring. The new lock will obviate all apprehension from this cause.

The Board, keeping in view the directions of the Stockholders to double all the locks at the points where they are combined, determined to proceed with these two indispensable improvements, and to rely on the Stockholders to furnish means for paying the cost, as well as to provide for the other works in which the Board had engaged in obedience to their directions. — They have, therefore, prepared the draft of an ordinance, with an estimate of the sums that will be requisite for the purposes just mentioned, to which is to be added as much more as will be necessary to complete the reservoir and the two locks at Frick's, so necessary to facilitate the trade with the Union and State canals, and such other work as the Stockholders have ordered to be done.

The remainder of the loan, authorized in January, 1833, was raised at the rate of interest of five per cent.

The Board have to announce, with much regret, the decease on the 26th July last, of their late Treasurer and Secretary, Thomas Harper. These offices he had filled with satisfaction to the Board, and with singular integrity and correctness, since the year 1816.

The quantity of coal shipped from the Schuylkill mines in 1834, was tons 224,242

There were received from the Union	
Canal	2,450
The mines on the Lehigh produced	106,244
Those of the Lackawana produced	43,700
Making in all	376,636
From the same sources, there came to market in 1833	487,971

Showing a difference in the two years of 111,335 but against this is to be placed the quantity on hand at the beginning of 1834, which may be estimated at about an equal quantity, and showing the supply in 1834 to be equal to that of 1833, except the quantity on hand on the opening of 1833 (computed to be about 60,000 tons) and which entered into the consumption of that year.

It is therefore reasonable to suppose, that on the opening of the trade in the spring very little coal will be found remaining on hand, and that we may therefore count upon a large trade in this article, and a very brisk demand during the present year. Favourable considerations for future estimates are to be found also in the important and extensive improvements of the State on the north and west branches of the Susquehanna, which bid fair not only to conduce to the great benefit of the State, but to add materially to the increase of the navigation on our canal, as the first link of communication.

The completion of the Danville and Pottsville Rail Road, as far as the mines belonging to the city, promises to add very largely to the supply of coal, and its progress to the Susquehanna now rapidly advancing, will bring still further contribution to the trade on our works, which we may be permitted to say will soon be ready for any increase of business that may be required.

Of the quantity of coal from the Schuylkill mines, there were delivered by the way, short of the city.

	tons 18,572
The toll on coal, was	\$204,033 04
And on other articles,	95,350 91
Making the total receipts	\$299,383 95
Of which there was from the ascending trade,	\$53,574 91
And from the descending trade,	245,809 04
The whole tonnage conveyed last year, was	tons 395,720

Of which belonged to the ascending trade	tons 55,953
Ditto descending ditto	339,767
Of the toll which was derived from the Union Canal,	
there was of the ascending trade	\$25,967 79
Ditto descending trade	22,961 94

Making a total of	\$48,929 73
The rents in 1834, from Real Estate, Ground rents,	
and Water rents, amounted to	\$16,687 67
And the arrears amount to	5,441 34
The income in 1835, from rents, it is estimated,	
will be	\$18,209 82
The Board offer as part of their Report, the following statements:	

No. 1. A tabular account of the business of the Company since its commencement, showing the quantity of coal transported, the rents received, and the toll on coal and other articles.

No. 2. A general account current, showing the cost of the works, the Capital Stock, the Money borrowed, the Current Expenses, &c.

No. 3 and 4. Accounts of the various articles which were conveyed up and down the navigation in 1834.

In conclusion, it may be remarked, that after passing through a season attended in its commencement with

serious discouragements, the concerns of the Company, with reference to the past, are far more satisfactory than it was expected they would be, and with a view to the future, are more encouraging than at any former period. The works, throughout, are in good order.—The supply of water is made secure, even for seasons the most unpropitious. And the employment for the navigation is steadily increasing, by the constant growth of the trade heretofore carried on, and the continual opening of new sources, the supplies from which will come into this channel. Of the probable results from the extension of improvements by the State or by Companies, as applied to any given period, there are not yet data to form any estimate. All that is certain seems to be, that in a very few years they must greatly augment the usefulness of the navigation to the public and its value to the Stockholders.

In the meantime, however, there is a sure dependence upon the augmented productiveness of its accustomed trade, in a ratio of which some opinion may be formed as to the year now entered upon.

Judging from the past and the present, it is quite within bounds to believe, that the tonnage transported on the navigation will very much exceed that of 1834.

All which is respectfully submitted.

JOSEPH S. LEWIS, President.

January 5th, 1835.

#### No. 1.

#### General Statement of the Business of the Company from its Commencement.

Years.	Total tonnage.	Tons of Coal.	Toll on Canal.	Toll on other articles.	Total toll.	Descending Toll.	Ascending Toll.	Amount of Rents.
			\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
1815	No receipts in these years.							
1816								
1817								
1818					233 00			
1819					1,202 16			
1820					803 07			
1821					1,792 60			
1822					1,054 97			
1823					1,964 38			
1824					635 00			
1825		6,500	9,700 00	6,075 74	15,775 74	13,363 74	2,412 00	4,700 00
1826	32,404	16,767	25,147 00	18,961 87	43,108 87	32,968 97	10,139 90	4,900 00
1827	65,501	31,360	33,317 00	24,832 74	58,149 74	42,865 27	15,284 47	6,967 00
1828	103,463	47,284	46,202 00	40,969 56	87,171 56	64,001 56	23,170 00	7,618 00
1829	134,524	79,973	77,032 00	43,007 00	120,039 00	92,186 00	27,853 00	10,574 00
1830	180,755	89,984	87,192 00	60,973 95	148,165 95	105,231 36	42,934 59	13,800 00
1831	196,413	81,854	78,781 00	55,224 32	134,005 92	99,995 52	34,010 40	13,750 00
1832	327,921	209,271	199,784 00	65,045 70	264,829 70	218,218 00	46,611 70	15,207 00
1833	445,849	252,971	228,138 00	97,348 00	325,486 63	263,744 00	61,743 63	16,673 00
1834	395,720	226,692	204,490 14	95,350 91	299,841 05	246,266 14	53,574 91	16,687 67

#### No. 2.

#### Statement of the Accounts of the Company, January 1, 1835.

DR.	CR.
Capital Stock,	
Permanent Loans, \$1,341,560 07	
Contingent Fund invested in Loan, 16,039 93	
	1,357,600 00
Tolls of 1834, including balance of \$3,239 58 from 1833,	302,623 43
Rents, 16,687 67	
Contingent Fund, 429 52	
Individual Accounts, 14,403 79	
	\$3,344,344 41
	General charges, being cost of the works, including Real Estate and damages, \$3,048,963 62
	Current expenses, being cost of repairs, Salary to Officers, Lock-keepers' wages, &c. this year, 68,110 60
	Interest Account this year, 66,566 37
	Dividend No. 9, made in August last, 74,299 50
	Individual Accounts unsettled, 31,650 28
	Cash, balance, 54,754 04
	\$3,344,344 41



## No. 3.

*Tonnage of Articles ascending the River, 1834.*

Merchandise,	19,849
Fish,	2,962
Salt,	3,472
Plaster,	10,070
Grain,	486
Iron,	1,829
Blooms, Pig Iron and Castings,	354
Nails,	10
Lime and Limestone,	5,702
Iron Ore,	3,002
Bricks,	473
Porter and Ale,	62
Lumber,	3,488
Marble and Stone,	243
Coal,	2,179
Flour,	251
Sundries,	343
Burrs,	78
Steel,	12
Clay,	105
Sand,	159
Wood,	299
Bacon,	11
Whiskey,	20
Hay,	52
Gravel,	308
	—55,821

Passing Fair Mount only, 132

Tons 55,953

## No. 4.

*Tonnage of Articles descending the River, 1834.*

Coal,	226,692
Flour,	10,255
Whiskey,	1,953
Lumber,	14,803
Grain,	10,734
Iron,	1,955
Blooms, Pig Iron and Castings,	5,844
Nails,	1,445
Lime and Limestone,	56,102
Iron Ore,	1,563
Butter,	249
Leather,	349
Marble,	240
Stone,	1,767
Bark,	306
Wood,	1,101
Tobacco,	1,147
Pork,	800
Sundries,	427
Steel,	7
Starch,	57
Oil,	53
Glass,	175
Peltries,	38
Wool,	229
Cotton,	51
Rags,	121
Feathers,	43
Coke,	11
Horns,	2
Potash,	12
Sumach,	2
Ginseng,	16
Beef,	8
Bricks,	7
Merchandise,	40
	—338,564

Passing Fair Mount only, 1,203

Tons 339,767

## RESOLUTION.

*Adopted by the Stockholders, 5 Jan. 1835.*

*Resolved*, That, in consideration of the long and faithful services of the late Thomas Harper, Esq. for eighteen years Secretary and Treasurer of the Company, with a very moderate compensation, and as an acknowledgment of regard for the memory of an officer who served the Company with so much zeal and integrity, and died in its service, the President and Managers be directed to present to the Widow of the said Thomas Harper One thousand dollars, together with a copy of this resolution.

—  
OFFICERS OF

*The Schuylkill Navigation Company for 1835.*

Joseph S. Lewis, *President.*

## MANAGERS.

Manuel Eyre,	Henry Troth,
Jonas Preston,	Charles H. Baker,
Thomas Firth,	John Sergeant,
George W. Holstein,	John Bohlen,
Joshua Lippincott,	Edmund Wilcox,
Lindzey Nicholson,	Joseph T. Mather.
Claudius Harper, <i>Treasurer and Secretary.</i>	

## REPORT OF THE CANAL COMMISSIONERS.

Report of the Canal Commissioners, upon the amount saved to the State in the construction of the Public Improvements by the facilities afforded by them.—  
Read in the House of Representatives, Jan. 9, 1835.

HON. JAMES THOMPSON,

*Speaker of the House of Representatives.*

Sir:—In compliance with a resolution of the House of the 18th of December last, requiring the Canal Commissioners to report to the House the amount of money saved to the State in the construction of the public improvements by the facilities afforded by them, stating the cost of transporting materials for their construction, as far as they have been transported on any of the canals and rail-roads of the Commonwealth and charged with toll.

The annexed copies of reports from the superintendents of the Columbia and Allegheny Portage rail ways are respectfully submitted.

These reports contain the information required in detail, as far as the same can be accurately ascertained, and it appears from them that there has been saved to the state in consequence of the facilities afforded by the improvements in the transportation of materials, the sum of seventy-one thousand five hundred and seventy-six dollars and forty cents; but this sum is far short of the actual amount saved. The low prices at which contractors were enabled, in many instances, to take the public work in 1831, affords conclusive evidence of the fact that they regulated their prices with a proper view to the facilities which would be afforded to them by the works then completed.

As the Portage rail way is located along the slope of the Allegheny mountain, through uncultivated land, a great portion of the supplies required by the contractors, had to be procured at Johnstown—and had to pass a greater or less distance upon the canal to that point, and paid toll to the State. The facilities thus afforded by the canal, could not fail to have the effect of reducing the prices at which the work was taken. In the construction of the second track which was let after the first was completed, the saving to the State must be greater than that on the first track, as the facilities afforded by the first track for transporting materials and provisions necessarily entered into the estimates of contractors at the time they bid for the work—of the amount thus saved to the State, it is apparent no exact calculation can be made.

On the Columbia rail way the saving to the state is not so great as on the Portage rail way, as it is located through a populous section of the country, affording an abundance of all the necessary supplies to enable contractors to carry on the work. The fact however has been ascertained that where contracts for making the second track were abandoned, they were subsequently re-let at lower prices. And in many instances contractors sunk money in the completion of the first track, but saved themselves in completing the second, showing plainly that they had taken into their calculations the facilities which would be afforded them by the completion of the first track.

The state has also saved money in the construction of canals authorized by the act of 1831, by the facilities afforded by portions of canal finished prior to that date, and particularly in the construction of the Wyoming line; a large portion of the supplies for the workmen and all the lime used in the works on this line were transported from 13 to 17 miles on the canal, and paid toll to the state. These facilities it cannot be doubted were taken into consideration by the contractors who bid for the work.

By order of the board,

J. MITCHELL, Canal Commissioner.

Canal Commissioners' Room, Monday, January 8, 1835.

RAIL WAY OFFICE,  
LANCASTER, January 5, 1835. }

JAMES CLARKE, Esq.

President Board of Canal Commissioners.

Sir:—In compliance with the request of your board accompanying a resolution of the House of Representatives of the 18th December 1834, relative to the amount saved to the state in the construction of the public improvements by the facilities afforded by them, &c. I beg leave to submit the following report.

There have been used on the second track of the Columbia rail way 24,371 locust cross sills, which were transported on the rail way an average distance of 35 miles, costing by the rail-way including the tolls paid to the state 16 cents each. To have conveyed them the same distance by wagons on the turnpike, they would have cost 36 cents each, making a difference of 20 cents, which amount it is fair to infer has been saved to the state. As the competition in procuring contracts induced bidders to calculate the lowest prices at which materials could be delivered, and had contractors not calculated on delivering those ties for the second track on the rail way, it is evident the state would have had to pay 20 cents additional cost of transportation.

Then 24,731 sills at a saving of 20 cents on each would amount to	4,946 20
4000 sills were purchased at Columbia, for the repairs of the eastern 22 miles upon which (after paying tolls) the state saved 25 cents on each	1,000 00
3936 tons of rail way iron transported on the rail way at a saving of \$1 25 per ton after paying toll	4,920 00

Amount saved in construction \$10,866 20

To the above might fairly be added the advantages resulting to the contractors, from the use of the first track in conveying the broken stone from one part of their sections to another, and which no doubt, entered into their calculations in the arrangement of their prices, but to what amount there are no data on which to found a calculation.

The advantages which will result to the state from the use of timber so durable as locust, could not have taken place had it not been for the facilities afforded by the state canals for transporting them; the entire quantity used was brought upon the canal from different points between Raystown Branch and Hollidaysburg, and many of them were brought from the west side of

the Allegheny mountain and conveyed to Hollidaysburg by the western canal and Portage rail way.

Respectfully submitted,  
W. B MITCHELL,  
Superintendent Columbia rail way.

# RAIL WAY OFFICE.

HOLLIDAYSBURG, Jan. 2, 1835.

JAMES CLARKE, Esq.

President of the Board of Canal Commissioners:

Sir:—In pursuance of the instructions of the board, and a resolution of the House of Representatives, I herewith transmit you a statement, which I consider a fair estimate of the amount of money saved to the State in the construction of the public improvements by the facilities afforded by them in transporting materials for the Portage rail way:

The quantity of edge rails and chairs delivered for the first track, was 2601 tons—the distance carried on the Pennsylvania canal being from Portsmouth to Hollidaysburg, 152 miles; The average price was 5½ cents per ton per mile, or \$7 98 per ton for the whole distance, Total cost, \$20,755 98

To deliver the same quantity by wagons from Portsmouth to Hollidaysburg, the price could not be less than \$20 per ton, the whole cost therefore, would be 52,020 00

Hence on 2601 tons there was a saving to the State of 31,264 02

The quantity of edge rails delivered for the second track, by canal and rail way, say 170 miles from Portsmouth was 1617½ tons, the average price was 5½ cents per ton per mile, or \$9 35 per ton for the whole distance.— Total cost, 15,121 35

To deliver the same quantity the same distance by wagons would have cost \$22 per ton, or 35,579 50

Saving to the Commonwealth on second track, 20,458 15

Entire saving on the carriage of rails and chairs, \$51,722 17

The cost of American chairs for the first track was \$69 50 per ton. But by reason of the facilities afforded by the public improvements, and decrease in the price of metal, the chairs for the second track were delivered at an average of \$55 93 per ton, making a difference of \$13 57. Upon allowing \$4 per ton for the decrease in the price of metal and there will be a saving to the commonwealth, because of the non-employment of wagons of \$9 57 per ton. This sum on 600 tons will give a total saving to the State of 5,742 00

The ropes and miscellaneous articles transported from Portsmouth to the Portage amounted to 98½ tons.— These could not have been carried on wagons under \$22 per ton, making the sum of

\$2,167 00

Whereas the same were carried by canal and rail way at an average of \$9 35 making,

920 97

Thereby saving to the State, On the first set of stationary engines transported to the Portage, the saving was inconsiderable, as many of them had to be transported by land from Blairsville.— The average saving, however, on the second set may be put down at \$200 each, which multiplied by ten gives

1,246 03

2,009 00

Total saving to the Commonwealth on materials purchased for the Portage rail way and transported on the public improvements and paying toll,

\$60,710 20

Respectfully submitted,  
S. JONES, Superintendent.

#### PUBLIC MEETING.

In pursuance of public notice given, a large and respectable meeting was held by the Tax-payers of Bucks county, at the public house of Joseph Cowell, in Point Pleasant, on the first day of January, 1835, in order to oppose the damming of the river Delaware, at the head of Wells' Falls, as recommended by the Commissioners appointed by the States of Pennsylvania and New Jersey, relative to the use of the water of the river Delaware; when on motion

Col. DANIEL BOILEAU, of Tinicum, was appointed President, and

JOHN LEWIS, of Plumstead, and JOHN DENN, of Nockamixon, Vice Presidents, and

John N. Sulliday, Esq. of Tinicum, and Thomas Pursell, of Nockamixon, Secretaries.

The object of the meeting being stated by the President—on motion a committee consisting of the following named persons, were appointed to draft resolutions expressive of the sense of this meeting, viz:—Joseph Hough, Esq. Barnet Snyder, Cephas Ross, Nicholas Swartz, Oliver Hampton, Stephen K. Price, William Youngken, Isaac B. Williams, Jesse Thomas, Esq. Pursley Tintman, Jonas Worman, Dr. Watson P. Trego, Jesse Riegler, and Isaac Laubenstine. The committee having retired about an hour, when they returned and presented the meeting with the following preamble and resolutions, which were unanimously adopted.

Whereas, in pursuance of resolutions passed by the Legislature of Pennsylvania, Commissioners were appointed to act in conjunction with Commissioners appointed by similar resolutions of the Legislature of the Commonwealth of N Jersey, relative to use of the waters of the Delaware river, who have made report of their examinations and inquiries respecting said river together with an agreement, made and concluded, between the joint Commissioners on the part of each State to the Governor who has transmitted the same to the Legislature.

And Whereas, the free navigation of the river Delaware is of vital importance to those living on the bor-

ders of it, from its head waters to tide, as well as the whole community in general, it becomes us whenever an attempt is made to affect its free, natural channel, which has been used in common, by all citizens, as a great public highway from the earliest settlements of the country until the present time, to call upon the Legislature to protect the free descending and ascending navigation of said river

And Whereas, the said Commissioners have recommended and agreed upon a dam at the head of Wells' Falls, which will materially affect the channel, and totally destroy the shad fisheries, which are very valuable, upon the river, which have always been protected by the laws of the adjoining States, and particularly, by the compact of 1783, entered into by Pennsylvania and New Jersey.

And Whereas, the Lumbering trade, which is the most important that descends the river, would be materially injured by the erection of the dam—they having experienced, to their great disadvantage, the effects of a dam at the mouth of Lackawaxen, with a sluice, where there has been hundreds and thousands of dollars worth of lumber destroyed by descending with rafts over the sluice of said dam, but there the raftmen have a partial remedy, as they can recover damages from the Company, which a dam at Wells' would entirely defeat—of recovering damages for injuries sustained, as the losers could not recover damages from the Commonwealth, by suit.

Therefore Resolved, That it is inexpedient to erect a dam in the river Delaware for the following reasons, viz:

1st. Because there is now, when the canal is in navigable order, a full supply of water, which experience has taught us the last season, as the river has been lower, take the whole season together, perhaps, than it has been for the last 30 years.

2d. Because there has been a water power erected at the head of Wells', at a great expense, to raise water out of the river into the canal, and if it should ever be necessary to raise more at any time, there is room left, purposely, for an additional wheel which will raise double the quantity of water now raised, which will not cost, exceeding, \$500 (which has been attested by the contractor who done the work) thereby raising more water than is actually wanted, without any further interference with the channel of the river.

3d. Because if the whole machinery for raising water was destroyed, a permanent feeder is practicable without interfering with the navigation of the river by extending a wing from the head of Wells' Falls to Phillip's ripples, which will cost less than by any other mode, and furnish an ample supply of water at all times.

4th. Because the erection of a dam in the river Delaware, at the head of Wells' Falls, would materially affect the free navigation of the river, destroy the shad fisheries, and otherwise materially injure the free trade of the river.

5th. Because the compact of 1783 guarantied and gave certain rights to fisheries which will be totally destroyed by the compact now in contemplation, without ever making any provision for them.

6th. Because there is a sufficiency of water in the canal, as will be attested by every waterman, and that there is more water wasted by over falls and leakage, which may be stopped, at a small expense, than will supply two outlet Locks, thereby not interfering with the free navigation of the Delaware.

7th. Because there are many honest and industrious citizens, considering the good faith of the Commonwealth to protect them, have, at a heavy expense, cleared fisheries, which will be entirely destroyed by the erection of the contemplated dam.

8th. Because we do not believe in misrepresentation—it is upwards of 26 miles from Easton to Black's Eddy, and not more than 8 miles from thence to Newhope, and by a reference to a letter accompanying the report

it would appear that it was only 25 miles to Black's Eddy; and 10 miles thence to Newhope.

9th. Because there has been misrepresentations from interested individuals presented to the Commissioners as well as to members of the Legislature, (as an instance the letter above alluded to will shew, (there is no evidence that the information given was asked for, but gratuitously given, which is believed to be erroneous,) the principal topic in the letter is limestone, and for the information of the Legislature, we state that there is more limestone in the vicinity of Durham and Easton than there is at Newhope, and can be burned and delivered cheaper, and the Commonwealth will receive the benefit of the tolls on it for 35 miles, instead of a dam to accommodate Limeburners in the vicinity of Newhope, to convey their limestone across from Newhope to New Jersey, free of toll.

10th. Because this interference in the free navigation of the river has never been asked for by citizens acquainted with the facts; but if asked for at all, it has been privately and by individuals through sinister motives.

11th. Because we are more willing to believe those most interested in the navigation of the river and canal, than we are those interested in projects for their own benefit, to be made at the expense of the State, and the tax-payers to pay for them.

12. Because the citizens along the river were almost unanimously opposed to the canal, but give their assent in preference to having the river dammed or obstructed by slack water navigation, as was proposed.

13th. Because a dam and outlet at New Hope would be attended with loss to Pennsylvania in the amount of toll, as boats constructed to pass the Jersey canal cannot pass into our canal, but our boats can pass out of our canal into that of New Jersey, so that the balance of trade would be against the interests of Pennsylvania.

Therefore, Resolved, That a committee of correspondence be appointed to forward these proceedings to Harrisburgh, and correspond generally upon the subject—also a committee of vigilance in each of the upper townships, to circulate petitions and get signatures: whereupon the following persons were appointed. On motion

Resolved, That the officers of the meeting be added to the committee of Correspondence.

The committee of correspondence consists of the following named persons:

Col. Daniel Boileau	John Lewis
John Derr	John N. Soliday
Thomas M. Pursell	Wm. Long, Esq.
Michael Fackenthall, jr.	John Adams, Esq.
Samuel Carrell	Joseph Hough, Esq.
Casper Hinkle	Cephas Ross
John Ruckman	Isaac B. Williams
Cyrus Livezey.	

The Committee of Vigilance consists of the following named persons:

John Houpt	<i>Springfield.</i>
Dr. Francis L. Bodder	Andrew Apple.
Jacob Treichler.	Daniel Afflerback

Christian Bertels	<i>Haycock.</i>
John Sellers	Samuel Afflerback
Maj. John Stoneback.	Maj. Christian Man

Henry Eekel, Esq.	<i>Bedminster.</i>
Col. George Hager	Jacob Kramer
Jacob Kichline.	Jacob Beidler

Jacob Worman	<i>Rockhill.</i>
Andrew Walter, Esq.	Thomas Sellers
Henry Hartzel.	Isaac Cassell

Joseph Himmelwright	<i>Milford.</i>
	David Drissell, Esq.

Jacob Clymer, Esq.  
Jacob Bleiler.

Philip Ball !

John E. Kenderdine  
Charles D. Fell  
John T. Neely.

*Solebury.*  
Charles Rice  
Jonathan Ely, Esq.

Michael Walter, Esq.  
John Dyer  
Christian Myers

*Plumstead.*  
Dr. Wm. James  
Smith P. Jones

George Wyker  
Peter T. Barntz  
Peter Bloom.

*Tynicum.*  
John Lutz  
Abraham Worman

Rev. Henry Miller  
Nicholas Buck  
Jacob Stover.

*Nockamixon.*  
David White  
Col. Jacob Kintner

M. Fackenthall, Esq.  
Dr. Merrick  
John Mills.

*Durham.*  
John H. Johnson  
Samuel Long, Esq.

James Cummings, Esq.  
C. L. Wm. Addis  
Daniel Harley.

*Warwick.*  
Hugh Mearns  
Christopher Bloom, Esq.

Wm. Fenton Esq.  
Wm. Watson, Esq.  
Maj. Henry Carver.

*Buckingham.*  
John Simpson, Esq.  
Dr. Silas Beans

Daniel Shive, Esq.  
Col. John Matts  
Abel Lester.

*Richland.*  
Caleb Foulke, Esq.  
Anthony Amey

Wm. H. Rowland, Esq.  
Rev. Joseph Matthias  
Thomas Campbell.

*Hilltown.*  
Abel H. James  
Griffith Jones

Maj. James Wier  
Capt. John Robbarts  
Henry Walter.

*New Britain.*  
Capt. Robert M'Kinstry  
Jame Polk

Hon. Matthias Morris  
Henry Chapman, Esq.  
Nathaniel Shewell, Esq.

*Doylestown.*  
Gen. Samuel A. Smith  
David Riale, Esq.

Robert Thompson, Esq.  
Francis G. Lukens  
Philip Brunner.

*Warrington.*  
William H. Long  
Jones Walter

Resolved, That the proceedings of this meeting be signed by the officers, and published in the papers of the county of Bucks, Northampton, Pike and Wayne; also in the American Sentinel, and United States Gazette.

DANIEL BOILEAU, President

JOHN LEWIS, }  
JOHN DERR, } Vice Presidents.

JOHN N. SOLIDAY, }  
THOMAS PURSELL, } Secretaries.

**A WILD CAT.**—A large animal of the above kind, was killed on the Conowago hills, 1½ miles from York Haven, York county, on Saturday last. After some chase the animal "treed," the hunters assembled near, and after seven discharges brought the "critter," wounded to the ground, among the dogs, (five in number,) all of which it would have whipped, and sped its way, but for the interference of the hunters.—*York Gazette.*

The Schuylkill broke up on Thursday night. The Delaware was fast yesterday.

B. A. M. Schell.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.--NO. 4.

PHILADELPHIA, JANUARY 24, 1835.

No. 368.

## LAW CASE—BRINTON'S WILL.

Lee of Warner

vs.

Brinton.

*Charge of the Court.*

DELIVERED BY JUDGE BALDWIN.

Edward Brinton in his life time, was seized of a tract of land in Birmingham Township, Chester county, lying on the South side of the Keonett road, on which he resided, containing by estimation eighty acres; he died leaving one son, the defendant, and eight daughters of whom the wife of the lessor of the Plaintiff is one. Six of the other daughters with their husbands have conveyed their shares to him, so that he is invested with the title to seven-ninth parts of this land, if Edward Brinton had not disposed of it in his life time by his will duly executed, so as to pass the land to the defendant, and will be in such case entitled to your verdict. On the other hand, if Edward Brinton did devise this land to his son James, your verdict must be for the defendant—the whole case therefore turns on the single question of whether he made a valid testamentary disposition of this property, by which the descent to all his children as directed by the act of assembly in case of his dying without a will, will be interrupted in favor of his son.

It is not pretended that Edward Brinton died without any will, it is admitted that the paper executed on the 7th August, 1806, is a valid will, duly executed and proved according to law to pass real estate, but by this will he only disposes of the property, in question during the widowhood of his wife, saying nothing to whom it should go after her marriage or death. Unless therefore he has disposed of the remainder in fee, by some other paper duly authenticated to pass lands, or which can be transferred to, and be made a part of his last will and testament, the law considers him as dying intestate as to this land, as if he had made no will at all.

The act of Assembly requires that all wills concerning real estate shall be in writing and be proved by two witnesses. You will then consider a will to be the written declaration of a man of his intention as to what shall become of his property after his death—proved by two witnesses. The evidence in the case is before us in the transcript of the proceedings of the Registers Court of Chester county. (Vide the copy of the will and certificate of probate,) and the petition to the legislature. This is legal and competent evidence to establish the paper set up as a will in the absence of any opposing testimony. None has been offered in opposition to the executed will, you will therefore take that so far as it goes, as the established will of Edward Brinton, agreed to by both parties now, and never intended to be contested by any of the family.

As to the paper of instructions, or the rough draft of the will, drawn up by Mr. Gibbons, which is copied into the certificate of probate, you will take it only as prima facie or presumptive evidence of its being any part of the will of Edward Brinton, open to be contradicted or disproved by any testimony competent to show, either that he did not make it his will in fact, or that it is not in law his will. The other children are as fully at liberty to contest the paper after probate as

before, the decree of the Registers Court concludes them in no matter either of law or fact, whether it relates to the sanity of the testator, the execution proof or construction of the paper. 3 Rawle 20, 4, S & R 193, 12 S & R 283, 10, S & R 84. It is only in virtue of the act of Assembly, that the proceedings of the Register, or the Register's Court can be admitted in evidence, neither the copy or probate of a will are evidence of a devise of lands at common law 5 S & R 213, 3 Wash. 582, 3, 10 Wh. 465, 70, 201, 4, and however regular and full the probate may be, it is only prima facie evidence; its effect is destroyed if on the face of it, the will appears to have been unduly admitted to record, or it appears by extrinsic evidence 5 S & R 215, 1 Wash 302, 1546. This may be done by proof of the incompetency of the witnesses, defect in their evidence to establish the necessary facts, or by showing that in point of law the proof before the Register was insufficient to establish the paper admitted to probate as the last will and testament of the testator. 1 Yeates 87, 90, 4 Yeates 413. In order to show the legal insufficiency of the proof on which the Registers Court acted in the present case, the Plaintiff has given in evidence the whole proceedings before the Register and in the Registers Court, which were the foundation of their decree, admitting the paper in question to probate, as part of the will of Mr. Brinton. It was necessary for them to do this, in order to make their objections to its establishment as a will, for otherwise the certificate of probate under the seal of the Court, would have been open to the allegation, that it was made on due and legal evidence; and as the copy and probate were evidence without inquiring on what ground the Court acted, the Plaintiff would have been much embarrassed without resorting to the testimony referred to in their minutes. By inspecting them it now appears, that the only proof of the devise of this land to the defendant is contained in the minutes of the evidence of James Gibbons, of William and Amos Brinton, and a deposition or statement of James Gibbons which was read in the Registers Court, but is now lost and no copy or evidence of its contents produced, and the instructions themselves. These minutes are as follow. Vide minutes and instructions.

There is no doubt that the Plaintiff had a right to refer to these minutes, to show the foundation of the decree of the Registers Court, but we entertain strong doubts whether they are competent evidence on an ejectment to try the title to the land; they relate exclusively to a matter wholly unconnected with the personal estate, or the administration of the will, and it might have been a serious question whether the evidence was admissible, had the objection been made.—Vide 4 Wash. 187, 6 Cr. 219, 7 Cr. 271, 3 412, 6 Wh. 113, 2 Yeates 341, 2 Binney 511, 3 Rawle 20, 4 Yeates 413, 4 S & R 193, 10, S & R 84, 12 S & R 283, 4, 2 Rawle 178, 4 Wh. 220, 10 Wh. 201, 4, 465, 70, 5 S & R 214, 15, 4 Wa-h. 187, 8. But as the counsel on both sides have considered it properly before us, and have rested the case of their respective clients on its legal sufficiency, to establish this clause in the instructions or rough draft of the will as a devise of the land in question, the Court will consider it in this aspect alone. Taking the testimony as it is reduced to writing with all

legal inferences which a jury can legally draw from it, a true to the full extent, and connecting it with the only other evidence in the cause, the petition to the Legislature, we proceed to inquire whether Edward Brinton did devise this land to the defendant.

For all the purposes of this case the facts as stated are admitted to be proved, and the only question which remains is their sufficiency in law to make out the issue on the part of the defendant. This is a question of law which the law must decide, 8 Co. 155, a. It is an universal rule of property that it must descend and be enjoyed according to the course which the law has prescribed, unless the owner has made some other disposition of it which the law recognises as valid and binding 3 Rawle, 20.

The acts of Assembly of Pennsylvania have directed that the estate of a person undisposed of by will, shall descend to and be enjoyed equally by all his children; of the natural justice of this provision and its perfect congeniality with the genius and spirit of all the institutions of the state and country, no man can doubt.

It was a rule of the common law founded in the wisdom of ages, and adopted by our ancestors, that the heir at law should not be disinherited unless by the plain words or necessary implication from the will of his ancestor, and this rule is assumed as a sacred land mark of property in all countries where the law of the land is respected, as the guardian of the rights of the people. It is never departed from in that country from which we derive our best rules of jurisprudence, in which the oldest son is the sole heir to all his father's lands; surely it ought not be less respected here, where there is no odious law of primogeniture, and equality of right between the sexes has been established from the first settlement of the province in conformity with the policy of its founder.

This law leaves every man at liberty to do with his property as he pleases—his will is the supreme law, and when it speaks it must be obeyed—it is only when he makes no will or none which disposes of any particular part of his estate, that the law makes a will for him, and does that which he omits to do for himself by declaring to whom it shall go if he leaves behind him no directions testifying his intention in writing and so attested as to afford authentic evidence of his will as a muniment of title to the favored object of his bounty.

There is no rule more reasonable, than that which imposes on those who wish to divert the property of a deceased person from the established course of succession, the necessity of doing it by legal and satisfactory proof; nor is there any subject on which a regard to the peace of society and the security of property makes it more incumbent on juries and courts to adhere to fixed and settled rules than in cases of wills. They are the title deeds to a vast proportion of the property held by our citizens, and unless they are regulated by steady and well established principles, we lay a train of gunpowder under the possessions of purchasers. If a paper is established as a will, upon other than legal proof with any view to avoid a supposed hardship in a particular case, the consequences are intemperate. If a paper defective in law to pass an estate should be permitted to disturb the succession established by the act of assembly, we must give effect to one the object of which was to revoke a former will, and thus in the zeal to make wills where a deceased person had made none, we should destroy those which had been most solemnly executed. For it must not be forgotten, that the same evidence which will take an estate from an heir at law, will take one from a devisee under a will, which generally speaking is made and recorded by the same acts, and they have the same effect for both purposes.

The law is very liberal in favor of last wills, it makes great allowance for infirmities of body and mind, dispenses with all forms and requires no solemnities which are not absolutely indispensable in point of substance, to show the deliberate intention of the maker

to dispose of his property in some definite manner. The requisites are few and simple, every man however unlettered has the means of making his will by expressing his intention in writing and the writing proved by two witnesses, he has only to thus point out the thing he gives, the person to whom it is given, and the law effectuates his intention by declaring such paper to be his last will and testament.

Has Edward Brinton done so as to this tract of land? if he has the defendant is entitled to it, if not we cannot make a will for him, the question is whether this paper is his will. In cases of this kind very interesting questions often arise as to the kind of evidence, which is admissible to prove the various facts on which the validity of wills depend, those which have been made in this case are highly so, they have been argued on both sides with great ability and learning, and deserve yours and our most serious consideration. We do not know how much property may depend on the final settlement of the principles involved, and questions arising on this case, and cannot proceed with too much deliberation; we cannot settle the law; our opinion is subject to the revision of a higher tribunal which will correct our errors, but cannot reach yours. In laying down the law to you it is not as one may think it ought to be, but as in our consciences and on our oaths we believe it to be settled by the legislature and courts of justice, as a rule from which we cannot depart. We shall do it plainly and without reserve, so that whether our judgment is affirmed or reversed; this case will eventually place some principles beyond further discussion, and those who will read it, be able to understand what is, and what is not a will. There is but one kind of evidence on which a paper can be established as the last will and testament of any man,—it must be in writing, and proved by two witnesses, to be the written declaration of the makers intention, to dispose of his property according to its directions. The disposing intention and the fact of disposition, must appear substantially on the face of the paper, there must be a deviser and a devisee and a thing devised, when by a fair construction of the instrument, it contains these three requisites, it is a will however informal if duly proved—if either are wanting it is no will.

In the will executed by Mr. Brinton and witnessed by the subscribing witnesses, there is no devise of the remainder of this land, if there is any, it is by the instructions or rough draft written by Gibbons, but it is admitted that these were superseded in every thing but the one paragraph by the executed will.

We must then be satisfied that this clause of the rough draft was legally intended to remain as his will, while all the rest was supplied. The law requires that the will should be in writing, and proved by two witnesses, but it need not be signed by the testator 6 S & R 454, or be formally declared to be his will 1 S & R 263, 5, nor attested by subscribing witnesses, though it must be proved by two 2 Dall. 286, 6 S & R 47, 223, 484, 16, S & R 84, 1 Wash. 302, 346, it need not be written by the testator, if done by his desire or consent by another and he adopts it, and that is proved by two witnesses it is sufficient, 1 Yeates 91, 1 S & R 263, 6 S & R 454, or if a paper containing "the substance of a will with the usual act of execution subjoined though without subscribing witnesses or proof of publication, if found in his possession, that is prima facie evidence of its adoption as a testamentary act." But if the paper is destitute of every formal act of authentication, the presumption is adverse in the absence of proof of actual publication or any other act of recognition equally satisfactory. The omission to perfect an instrument which carries with it intrinsic evidence of a design to superadd an act of authentication which the decedent has not been prevented from executing by sudden death, is referred to a change of intention. Scraps of paper notes or memoranda or indorsements on bonds though intended to denote a testamentary disposition must contain at

least the substance of a devise. 3 Rawle, 20, 1, 4, S & R 557.

The testator may intend to correct the paper, he may give the rough notes or instructions to a scrivener to make a formal draft of a will, yet these will not invalidate it as a will, if he dies before the formal draft is executed or read over to him for his approbation, if the original instructions are duly proved they will control it when they differ. 3 Yeates 511, 14, and positive proof by one witness and circumstances equal to such proof by another are sufficient. 16 S & R 84. 5, but the paper must contain sufficient intrinsic evidence of a testamentary disposition, and be intended to be his last act in disposing of his property after his death.

This then is the important question in this case, was this devise in the instructions devising the homes'cad to James, intended by the testator to be his last will as to this part of his estate; that it was so in fact we have no doubt, but this does not suffice to make it operative as a will under the act of Assembly. That intention must not only have existed in fact, but be now so proved as to enable the court to carry it into effect according to the law. As at present advised, we should not doubt that if the testator had died without an opportunity of putting the rough draft into form by executing a will, these instructions would have been considered as his testamentary disposition of his property, but in the event which has happened a very different case is presented.

He makes a formal will, executes it in all legal form and solemnity, it is attested and proved by three subscribing witnesses and published as such in their presence it expressly revokes all former wills by him before made declares this and no other to be his last will and testament. Such a will would have revoked the most solemnly executed will, which he had made before and it must have the same effect as to all other papers of a testamentary nature; the important question then arises, can this clause in the rough draft be now established as his will, in relation to the property in controversy, on the evidence before us.

If it has any effect in law, it must be to make another will besides the one he has thus executed when he has solemnly declared that no other will shall be his will though before made by him; to confirm and ratify what he has annulled, by setting up a revoked paper, and virtually expunging the revoking clause from the executed will. The evidence must go farther than enabling us to get rid of the revocation, it must authorise us to add the revoked paper to the will, so as to make it a part of it in the same manner as if it had been introduced into it by the testator himself.

On a careful examination of the evidence, we find none which goes to show any act or declaration of the testator in relation to the disposition of his property subsequent to the execution of his will, what precedes the execution, can have no bearing on the revoking clause, for a revoked will must be republished before it can have life or effect. 4 S & R 296. 7. The testator has declared the executed will to be his only and last will and testament, so we must adjudge it unless the law will permit us to alter explain or construe it by evidence aliunde, as a case of ambiguity either 1. An ambiguity or doubt on the face of or in the body of the will, 2. That which arises on matter not in the will but out of it, when the words are clear, 3. That which is intermediate, partaking of the character of patent and latent ambiguity Bacon L. Crats 99, 100 3 Mason 9, 12, or 4. That which arises from a mistake of the testator or his omission to express himself intelligibly without explanation by averment or collateral proof.

In the case of Packer vs. Nixon we expressed our entire concurrence with the declaration made by the present Chief Justice of the Supreme Court of this State, that "Any settled rule which leads to a determinate effect (in comparison with which the fulfilment of any particular intent is of secondary value) is preferable to a process

which would destroy every thing like stability of decision and leave titles depending on intention to the decision of chance and the sport of opinion," p. 13, 2 Rawle 32. 10 Wh. 228. We also laid it down as a settled rule, that the intention of a testator must be collected from the words of the will, that no averment ought to be taken out of the will which cannot be so collected from the whole will applied to the subject matter to which it relates p. 14, 3 Co. 28 6, 3 Atk. 258, 4 Co. 48, 5, Co. 68, b. Latch 137, Harg. L. T. 495, 6, 1 Bro. Ch. 216, 3 Binney 148, 61, and that the parol declaration of the testator as to who should be his heir was of no effect in law, p. 18, Pl. 345 b.

There are however cases in which parol evidence will be admitted to show or explain the written intention of a testator in cases of what are termed latent ambiguities, or doubts which are thus defined by Lord Bacon. "There be two sorts of ambiguities by words, Patens is that which appears to be ambiguous on the face of the instrument. Latens is that which seemeth certain and without ambiguity for any thing that appeareth upon the deed or instrument, but there is some collateral matter out of the deed that breedeth the ambiguity Bacon L. Tracts 99, 1 Mar. 11, Hob. 32 4 Dow. P. C. 93. Ambiguities patens, is never holpen by averment, and the reason is, because the law will not couple and mingle matter of specialty, which is of the higher account, with matter of averment which is of inferior account in law, for that were to make all deeds hollow and subject to averment and so in effect, that to pass without deed which the law appointeth shall not pass but by deed Bacon 99. Vide 4, Cr. 224, 234, 8 Co. 155.

"Ambiguity of words by matter within the deed and not out of the deed shall be holpen by construction, or in some cases by election, but never by an averment, but rather make the deed void for uncertainty 8 Co. 155 a. As if a man give land to J. D. and J. S. and heirs and do not limit to whether of their heirs," or give land in tail, the remainder in tail with a proviso, that if he or they or any of them do any, &c. it cannot be averred on this clause, that the restraint was only on him in the remainder and the heirs of his body and that the tenant in tail in possession was meant to be at large, Bac. 99.

"When the uncertainty cannot be helped by construction or intention it shall be holpen by election," as if I grant ten acres of wood in sale where I have an hundred acres; whether I say in my deed or not that I grant out of my 100 acres, yet here shall be an election in the grantee, which 10 he will take and the reason is plain, for where the thing is only nominated by quantity, the presumption of the law is that the parties had indifferent intention, which should be taken Bac. 100, 21, C. L. 290, 8 Co. 155, Hob. 33.

"But if the ambiguity is latent as if I grant my manor of S. to I. F. and I have two manors North S and South S this ambiguity is matter of fact and shall be holpen by averment, whether of them it was that the party intended should pass. But if the deed recites whereas I am seised of the manor of North S. and South S. and I lease you one manor of S there is clearly an election, so if the recital is of two tenements in D. and one is leased, these cases are where one name and appellation denominates divers things.

"There is another class of cases where the same thing is called by divers names, which shall be holpen by averment, because there is no ambiguity in the words, the variance is matter of fact, but the averment shall not be of intention, because it doth stand with the words, for in the case of equivocation the general intent includes both the special and therefore stands with the records. Bac. 101, 1 Mas 11, 12, 5, Wh. 336, 7, S. P.

"As if I give lands to Christs' Church in Oxford, and the name of the corporation is C. C. in the University of O., this shall be holpen by averment because there is no ambiguity in the words." Bac. 101 Hob. 32

These are the illustrations of the maxim, "*Ambiguitas verborum verificatione suppletur, nam quod ex facto oritur ambiguum verificatione facti, tollitur*, by a great jurist in ancient times conformably to which are those which have since received the highest judicial sanction. When a latent ambiguity is produced in the only way in which it can be produced, that is by parol evidence, it must be dissolved in the same way, and there is no case for admitting it to show the intention upon a patent ambiguity on the face of the will. They are all cases of latent ambiguity and the objection to supply the imperfections of a will are founded on the soundest rules of policy and law 2 Cr. 29. It would be full of great inconvenience that none should know by the written words of a will what construction to make or advise to give but that it should be controlled by collateral averments out of the will and if they are admitted how can there be any certainty, a will may be any thing, every thing, nothing. 1 J. C. 234, 6 Conn 275. The statute appointed the will to be in writing to make a certainty, and shall we admit collateral averments and proofs and make it utterly uncertain, the witnesses and not the testator would make the will. 1 Mod. 210, 3 P. W. 354.

"If the effect of the introduction of the evidence would be to add new matter to the will, either the subject of the devise, or the name of a devisee, it would also authorise the striking out, of what was contained in an executed will, and thus though the will was made in form by the testator in his life time, it would be really made by the attorney after his death and all the guards of the law be utterly swept away." 21, C. L. 288, 92.

The established rules of law are safer guides in the administration of justice, than any considerations as to their bearing on any particular case of supposed hardship; and it is more wholesome to struggle not to let little circumstances take a case out of a general rule, than to struggle by them, to prevent its application. 6 V. 641.

As to instructions for making a will the established rules are.

That where they are subscribed as preparatory to a will, the execution of the will supercedes them, and where they differ the presumption is that the testator adopted the alteration. 21, C. L. 292. To establish any paper as a testamentary one, the court must be satisfied that the testator intended it to be a part of his will, and if there is more than one paper set up as a will, it must be shown that they were intended to be cumulative. Cond. Eccl. R. 452, ib. 30, 63.

If an unfinished draft is propounded as a will, it must appear that the deceased was prevented from executing it by invincible necessity or the act of God. 1 Cond. E. R. 30, 1, 63, S. P. 3 Rawle 20, 1.

If he omits to transfer a provision from the draft to the will, it cannot be supplied by parol evidence in connection with the draft, whatever may be the opinion of the court as to the actual intention or hardship of the case, though when the mistake was pointed out to the testator he proposed to insert the omitted legacies in the formal will, but as he did not do it, the Court could not supply the defect. 1 Cond. E. R. 63, 4. When an instrument is executed by a competent person he is presumed to know its contents and effect, and intend to give it the effect which follows from its contents and construction. 3 Cond. E. R. 290, 4, Cond. E. R. 269. Subsequent instructions intended for a new will, duly proved may be a codicillary paper, and operate as a revocation *pro tanto* of a former executed will. 1 Cond. E. R. 267, 9, 70, 3 Rawle 20.

In some cases instructions may be given in evidence when the executed will is ambiguous on the face of it, as to the person devisee—as a bequest to "her." The question was to whom the reference was—the instruc-

tions were admitted to show that testator had directed the legacy to be given to his wife, and that her name was omitted by mistake of the scrivener, 1 Cond. E. R. 444, 55. Here the will pointed out the ambiguity, and on its face necessarily referred to an explanation of the intention as to the meaning of the word "her," it was a case of an ambiguity helped by the reference in the will itself. So where the executed will was, "I give £60,000 in legacies," which were enumerated to the amount of 51,000, it then gave "the residue 4000"—making only 55,000 the draft of the will in testator's handwriting, at the bottom of which he had inserted the date of the will and the names of the witnesses, was admitted to show the mistaken omission 2 Cond. E. R. 509, 12.

Here the mistake appeared on the face of the will, and was helped by reference. So where the 20th sheet of a will was missing, and it appeared from the 19th and 21st pages, that the missing sheet was necessary to connect them as a component part of the will, that its omission was unintentional, and that it had been detached by accident—it was supplied by proof of instructions and other evidence, 2 Cond. E. R. 506. 21. C. L. 294. S. C.

So where a paper was executed in 1802, declared to be a codicil to the will of 1798, which had been destroyed and a new one executed in 1800; these facts were admitted to show, that the testator intended to refer to the existing will of 1800, and had by mistake, referred to the cancelled one of 1798, 1 Cond. E. R. 445, 52.

So where a will was endorsed "plan of a will," and so headed, but was otherwise perfect and complete, evidence was admitted to show whether it was intended to be a will, or was only authenticated as instructions, 1 Cond. E. R. 452, being consistent with the words of the will.

So where a deed in trust for A and B was indefinite as to the parts they should take, a deed from the trustee defining their shares, and other evidence was admitted to show, that it was according to the intention of the parties who intended that both instruments should operate as one deed, 17 S. and R. 110. both being executed at the same time.

In this respect there is no distinction between devices of real and personal property. In a leading case, the testator devised his estate to his executors, one of whom owed him by bond £3000, evidence was offered to show that he instructed the scrivener in writing to give the money to the executor, but he refused to insert it in the will, insisting that making him executor would release the debt; that the testator took counsel on it, who gave the same opinion, in confidence of which the testator executed the will without the devise: the evidence was not received, and the debtor executor was decreed to pay his co-executor one half of the bond. Talb. 240. 1. On an appeal to the House of Lords, they refused to hear the evidence read, and affirmed the decree, 4 B. P. C. 180. 4. The authority of this case remains unquestioned, and it has been expressly adopted in this state. 2 Yeates 304. 7 S. and R. 114. 1 J. C. 233.

It matters not how clear and full the instructions may be, or that they are signed by the testator and in the body of them declared to be a will, if the executed will contains no reference to them, and is on its face clear of ambiguity, as to the subject matter, 3 Cond. E. R. 290. 4 Cond. E. R. 209. 2 V. & B. 318. 6. Conn. 276. 4 Dess. 215.

Instructions to a scrivener cannot be given in evidence, 2 Vern. 98. He cannot be allowed to prove that he used a word, with a meaning different from its import of the true meaning of which he was ignorant. 7 S. & R. 113. 114.

A mistake in drafting a will does not make it void, 8 Conn. 265. And when a testator declares a paper to



be his will, the Court must take it as it is written. 1 Cond. E. R. 452. 5. 6. Conn. 274. 5. Mistakes are not to be supposed, if any construction that is agreeable to reason can be found out—the will that is in writing must pass the land, and must be decided by what is contained in it, 1 Atk. 415.

The written declarations of a testator made after the will are not evidence, 5 Bing. 435. 15 C. L. 490. 8 Conn. 264. unless the paper may be proved as a codicillary, 1 Cond. E. C. 267. 70. or a testamentary one, 6 V. 397. 4 Dow. P. C. 89.

A paper may be a will as to personal, though not as to real property, here and in England; the statute of wills of 34 and 35 Henry VIII. requires only that wills should be in writing, and the statute of frauds and perjuries requires subscribing witnesses only to wills devising real estate.

Instructions may be read to prove that testator knew he had particular relations—but no farther to prove what he meant by the words “poor relations,” 1 V. 231. 2.

On a question whether the devise to the wife was in lieu of dower, a rough draft of the will in testator's hand writing, containing the devise and the words “in lieu of dower,” which was omitted by the mistake of the scrivener—was not admitted. 2 Yeates 304.

The rule deducible from these cases, is, that instructions are in no case admissible to control or contradict the plain words of a will, or to supply an omission, unless there is something on the face of the executed will, which shows a mistake or omission by pointing or referring to something which the instructions will explain. When there is such a reference, whether the ambiguity is latent or patent, it may be removed by the instructions or other matter referred to or pointed out, the thing referred to being considered as connected with the will by the reference, so as to bring the case within the rule, “*id certum est quod certum reddi potest.*”

But when the will is ambiguous in its words, and contains no reference to any thing which can make it certain, or on its face admits of no construction, it is void. 11 C. 255. 56. 86. 3 Atk. 258. 3 S. & R. 607. 7 S. R. 114. 8 Co. 155.

As to parol or extrinsic evidence the rules are well settled.

It is not admissible to fill up a blank, 2 Atk. 239. 3 B. C. 311. 13. 21. C. L. 291. 3. or the omission of a devisee, 3 Atk. 257. nor to supply the written words of a will, it must be construed *ex visceribus suis*, 1 Yeates, 432. 2 Yeates, 304. nor to explain it unless it refers to something dehors of so ambiguous a nature as to require explanation, not of a doubt in the will, but a doubt on a matter out of the will, 7 S. & R. 113. 14. 11 C. 234. not in its construction but its factum, 3 Cond. E. R. 290. 4 Cond. E. R. 209. 21 C. L. 291.

When there is no description of the devisee or thing devised, it is not admissible, nor where the thing devised, is well described or defined in terms or by reference, in order to embrace what is not so described. As a devise of “my money,” evidence will not be admitted to show that the testator intended to give bonds, notes, and mortgages, 11 C. 231. 4. 14 I. R. 9. 14. so of a devise of my farm in the occupation of A. an averment that he intended to pass land in the occupation of B. cannot be admitted, 11 J. R. 212. 20. 14 C. L. 291. Godb. 16.

If the devise has a certain effect and operation to pass lands at the place described, it shall not be extended by extrinsic evidence to embrace lands elsewhere, unless the intention can be collected from the will itself, 21 C. L. 290.

A new description cannot be introduced into the body of the will, and no estate can pass that does not answer the description it contains, nor can evidence be received which amounts to a new devise, which the

testator is supposed to have omitted, or to add words which he has not used, 21 C. L. 291. 3 D. & E. 87. or where the will is silent, to apply it to a new subject matter of devise or new devisee, as to prove that the word “Gloucester” was omitted by mistake, so as to make the lands in that county pass by the will, though not referred to. 21 C. L. 292. 4. Newberg vs. Newburgh, in Dom. Proc. cited but is admissible where a description of the subject matter is imperfect; so of the devisee—or where the description is true in part but not in every part, if there is a sufficient indication on the face of the will to justify the application of the evidence. 21 C. L. 294.

If there is in any part of the will a sufficient description, it shall not be vitiated by any mistaken description or circumstance for “*utile per inutile non vitiatur.*” 7 I. R. 217. 1 M. & S. 301. Vide Bacon, L. T. 102, &c. Reg. 25. Or if it can be collected from the words of the will, that the description of two estates has been transposed by mistake—the local description may be rejected as surplusage for “*falsa demonstratio non mut.*” where enough appears after the false description is rejected. 21 C. L. 291. 4.

“An averment to take away surplusage is good, but not to increase that which is defective in the will of the testator. Godb. 131. Hob. 32. In deciding on the admission of evidence, and the construction of wills, the Court will look to the situation of the testator's family when it was made. 3 Dow. P. C. 68. 2 V. 217. 1 Wash. Va. 56. 5. and of the property he owned, in order to ascertain to whom he intended to give it, and what he intended to give by construing the words consistently with the state of his property and family, but not to introduce new words into the will. 21 C. L. 288. 94. Or to strike out those it contains, As a devise of all my lands in the Parish of C. called Hoplands, to my son J. If he dies without issue, Hoplands shall remain to B.—Hoplands was an entire farm extending into two parishes, but that part only passed which was in C. Cro. Jac. 22. 3.

So a devise of my lands of Ashton, or at Ashton, (which mean the same thing,) other lands not situate there, will not pass by any evidence aliunde. Dow. P. C. 65. 87. 91. The same rule was adopted on a devise of “his freehold and real estates, in the city of Limerick, and county of Limerick.” The testator had a small estate in the city, but none in the county of L. but had estates in the county of Clare, yet evidence of his intention was not admissible, to show that he intended to give the estates in the county of C. 21 C. L. 28. 9. 8 Bingham 244.

“The Court cannot do for a testator what he has not done for himself.” 1 Mas. 11. 12. “Or make a will for him while he sleeps in his grave,” 6 Conn. 174. and they cannot receive evidence of his declarations before or after the making of the will. 2 Vern. 93. 8 Conn. 264. 4 Wash. 265. 4 Dess. 215, &c. 4 Gall. 172. 1 Pet. C. C. 87. 8 Wh. 211.

Courts of law have always been jealous of admitting extrinsic evidence to explain the intention of the testator, and it is admitted only where an ambiguity is introduced by extrinsic circumstances, 4 Dow. P. C. 93. or in that class of intermediate cases, referred to by Lord Bacon and Judge Story, which partake both of the character of latent and patent ambiguity; as where the words are clear, but admit of two constructions, consistently with the meaning. Bacon L. T. 100. 1 Mas. 12. 5 Wh. 336. 7. S. P. 2. V. 217.

The admission of the evidence in such cases, is to give effect to the will, by removing the ambiguity, 4 Dow. P. C. 93. and is of such a nature as stands well with the words of the will. 8 Co. 155. a.

It is admitted where there are two persons of the same name, to show which was intended. 2 Atk. 373. 5. and 686. 2 Dall. 70. 72. 8 Co. 155. 1 Wash. Va. 55.

Where there is a mistake in the christian or surname

of the devise, 2 V. 218. 2 Atk. 373. Godb. 17. Co. & Litt. 3. a. If there is a certainty of the person meant, Sw. 480. In cases of resulting trusts, 2 Atk. 573. 1 Vern. 31. n.

Or where the testator used to call James, "Jackey," and gave a legacy to "John," Amb. 175. 2 Dall. 70. 1 V. 231. So where he had a piece named "Gertrude Yardley," whom he used to call "Gatty," and often declared he would do well for her; she took a legacy given to "Catherine Evanley"—there being no such person as C. E. 2 P. W. 141. 3. If the testator errs in the name and not in the person, the devise is not hurt by the error. Swinb. 480. 18.

If a devise is made to the church, it shall go to the Parish church of the testator; or, if he names a church and there are divers of the same name, it shall go to the one where he usually resorted: so if to "the poor," it shall go to the poor of his parish. Swinb. 489. Or if he was a refugee, and devises to the poor generally, it shall be intended to mean poor refugees of the same nation with himself, Amb. 422. 2 Rep. on Leg. 147. or to the charity school, and if there were two in the place, the legacy went to one of the children of which testator was fond, and to whom he had declared he would leave something at his death. 1 P. W. 674. 5.

The Court will look to the situation and circumstances of the testator, to ascertain his intention, 2 Eq. C. Ab. 366. 2 V. 213. the use to which the thing devised had been applied, 3 P. W. 145. and the association of the testator with one of the persons of the same name, to whom he had given a legacy, 2 Dall. 70. 2. 2 Vern. 593. 1 Vern. 31.

On the same principle, the Court will look to the testator's property, in order to ascertain what he intended to devise, 1 Wash. Va. 55, &c.

As where he had no real estate of his own, but had a power of appointment over real estate, and devised "all his real estate," it will pass the latter, otherwise the will would be inoperative. Hob. 160. 6. & 176. 3 S. & R. 111. 15. 1 Rawle 249. *Seaton vs. Kohen*, 2 V. jr. 589. 21 C. L. 292.

So where one devised all his freehold houses in a street, but had no freehold houses there, though he had leasehold houses there, the latter passed by the will. 1 P. W. 286. 21 C. L. 292. 2 Leo. Talb. 153. 3. P. W. 386.

It is sufficient if the devise shows the intention of the testator in substance, though it is defective in circumstances, or they fail. Hob. 32. As a devise of "my T. farm in the occupation of A." it appeared that only part was in his occupation, yet as the T. farm was a sufficient description, the whole passed. 1 M. & S. 301. So where he owned a house in 4th street, occupied by A. and devised "his house in 3d street, occupied by A." the house in 4th street passed, 2 Wash. 475. 6.

For these purposes extrinsic evidence is admissible to correct mistakes or remove ambiguities, by referring to the facts and circumstances on which the will is predicated, to apply the words and written intention of the testator to the devise and thing devised, and thus to effectuate the declared objects of the testator consistently with his will.

But when the evidence offered does not remove the doubt completely, then it is inadmissible, 3 Cond. E. R. 290. 4 Cond. E. R. 209. for if admitting its truth, there is a doubt on the words of the will, it is void, for uncertainty by the judgment of the law, and no averment dehors can make that good which upon consideration of the deed, is apparent, to be void.

If the averment which is out of the will stands well with its words, it shall be tried by the country, if otherwise it is matter of law. 8 Co. 155. a.

On a subject which has so often arisen in Courts of law and equity as this has, there is a multitude of cases in which general principles have been settled or recognised from the passage of the statutes of wills that have

never been departed from; we have noticed a sufficient number of the leading ones, to enable us to come to a conclusion entirely satisfactory in their application to this case.

Here is a perfect will duly and fully proved, which wholly omits any disposition of the land in question; there is no ambiguity on its face which can make it void; the revoking clause is absolute, unqualified, and without exception; we can therefore establish no other paper or part of a paper as the will of the testator, without directly expunging the clause of revocation. There is no latent ambiguity which arises from the application of the words of the will to the subject matter of the devise, or the person to whom it is devised; the evidence relied on, does not "stand well with the words of the will," it is wholly extrinsic and dehors the will, which as to the remainder of the estate in the homestead, contains neither a deviser, a devisee, or any thing devised. To make out the existence of either, we must introduce into the body of the will, a clause from the instructions to which no reference is made, which cannot be connected with it by any construction, but is a new subject matter of devise wholly foreign from the will. This is a fatal objection to the title of the defendant, which cannot be removed by the Court without overruling the best established rules and principles of law in the construction of the statutes of wills in England, adopted in this country in their application to our own acts of Assembly. Vide 1 Rawle 120. 1.

If in the adjudged cases, we had found any judicial precedent to authorise us to add this clause to the executed will, we should have felt at liberty to have followed it, as it would have accorded with what we are satisfied was the actual intention of the testator, as proved by the witnesses to the instructions or rough draft, as well as the general understanding of the family, appearing by their assent to the decree of the Register's Court, and their petition to the legislature to supply the omission, to insert the devise in the will.

But in every view which we can take of the case, there are difficulties which cannot be overcome. There is not a particle of evidence to justify us in striking out the revoking clause of the executed will, it must remain as an operative clause, and while it remains we can adjudge no other paper to be his will, if however this objection to the defendant's title could be removed the others are insuperable. The evidence removes no doubt or ambiguity which existed without it the only defect which it could cure is, the want of a clause devising the homestead; but as the will is wholly silent on this subject, the effect of the evidence is to make a new devise, not to explain a doubtful phrase or word in the will 1 Rawle 120. 1. This would be more than filling a blank by extrinsic averments, for it would be to supply the three indispensable requisites of a will, by collateral proof out of the will, when the law directs that they shall appear in writing in the body of the will.

That which is executed contains no disposition which affects the case; there is no deviser, devisee, or thing devised, without declaring the law to be, that instructions or the rough draft of a will are not superseded by a perfect executed instrument, and that the latter shall not be referred to a change of intention when they differ, but shall be controlled by the former. Admitting that the omission to transfer the devise from the draft, to the will, was a mistake in the scrivener, or of the testator, it is a case which has often occurred and repeatedly decided to be incurable, unless there is some allegation of fraud or imposition practised on the testator, neither of which is alleged in this case. The consequences of an omission to make a will at all, or to dispose of any particular part of a man's estate, is not to authorise a court and jury to make such an one as they may think he intended to make, but omitted to do it by mistake;—that would be a repeal of the statutes of wills, and introducing the very evils against which they

were intended to guard, produce most utter confusion in titles depending on dispositions of property which were to operate after the death of the owner. There may be cases of hardship growing out of the application of the law to special cases of individuals, they however are of trifling consideration when contrasted with the general mischief which would pervade society if there was no certainty in the law.

If men intend to dispose of their property by will in a particular way, and do not do it in the manner pointed out by law, they die intestate; the fault is not in the law, it is in the testator; the hardship which it may cause to the intended object of his bounty, is not visitable on the administrators of the law who must act within the line defined by the legislature. If the law is unjust, it must be amended by the legislative department of the government, you and we have only to ascertain what the law is, they must declare what it ought to be. In the decision of causes we have our appropriate duties; it is yours to declare what facts are proved by the evidence before you; it is ours to declare what the law is upon the evidence offered or the facts found. In this case, there is no question of fact; the truth of all the evidence is admitted; it is upon paper showing for itself, it admits of no doubt. You can find nothing more than that Edward Brinton intended to devise his homestead to James; that he put that intention into writing, by instructions or rough draft, and intended to insert it in the will; but that by mistake, or some other cause, it was not done.—Yet you cannot find that he did not make the executed will; that he did not revoke all former wills, or that the last one contains every clause which disposes of the remainder to James, or shows any mistake in its body. The facts which you can find are out of the will; they cannot be introduced into it by any power save that of the testator; they cannot be deemed a new will as they existed before the execution of the authenticated one; they cannot amount to a will by themselves, because the paper is revoked, nor be connected with the existing will, which contains not the least reference to the matter. The law therefore adjudges the evidence to be entirely insufficient to establish as the will of Edward Brinton, any other paper than the one he executed.

The counsel of the defendant has endeavoured to take his case out of the general rules of law, by the force of the introductory clause—"as to what worldly estate God has been pleased to bless me with, I give and dispose of in the following manner," which he considers as indicating an intention to dispose of his whole estate by that will, and that the omission to do it is an ambiguity which can be explained and cured by averment of extrinsic matter. There is no authority for giving such operation to this clause as to let in evidence of a devise not referred to in the will; the law is well settled that an introductory clause will not by its own force, enlarge an estate given in the body of the will, nor for such purpose be attached to a subsequent devising clause so as to give it a wider range. 1 Rawle 415.

The most that can be said is that where the words of the devise admit of passing a greater interest than for life, Courts will lay hold of the introductory clause, to assist them in ascertaining the intention. 10 Wh. 228. 9 4 Wash. 195.

It is carried down to the devising clause, in order to show the intention, but will not of itself give a fee. 8. S. & R. 289. Nor carry an estate that is clearly omitted; but if it be dubious whether it be omitted or not, it will help the interpretation. 1 Dall. 226. Vide 1 Rawle 415.

In this case, there is no devising clause to which the introductory words can be carried; if we give them any effect, it will be to make them the will itself, by republishing and establishing a revoked paper; this would be to overrule all authority, and to reverse every settled

principle which governs the construction of wills. A clause which cannot connect a devise for life with one in fee, cannot by its own force create a fee where no devise is made.

Besides, if we consider it evidence of the intention of the testator to dispose of his whole estate, it will not answer the purposes of the defendant; for the declared intention is to dispose of it by that will, and not a former one; it contains no reference to any other paper, and declares that he disposes of his estate in the following manner—that is as the will directs, and none other.—The utmost meaning, therefore, of which it is susceptible, is to show that as to the land in question, he had not fully executed his first intention declared in the beginning of the will—in other words, he has not devised the fee simple, and has left it to be distributed according to law.

It is, lastly, contended that connecting the other evidence with the executed will, such a case is presented as will authorise the Court to make it conform to the evident intention of the testator.

As a Court of law, we have no power to reform any instruments; we must decide upon them according to their legal construction, effect, and operation, apparent on their face, or with the aid of such evidence as is admissible by the rules of law to explain them. Courts of Equity will reform instruments made to carry into effect the contracts and agreements of parties according to their original intention, the agreement being the standard of right and equity between the parties, will be carried into effect, notwithstanding any defect in the instrument adopted as its execution. Yet where an instrument has been deliberately executed by the parties, under a mistaken opinion, of both as to its legal effect, a Court of Equity will not reform it, though it fails to effectuate their intention. 1 Pet. 1. 17.

But there is no analogy between these and cases of wills, there is no antecedent or existing standard by which to reform the instrument made to carry into effect the final and last will of a testator; unlike a contract or agreement which requires the meeting of two minds to give it efficacy; a will is the written declaration of the party, proved by two witnesses, to be a testamentary disposition of the testator's property. It then becomes its own standard; the only evidence of the will and volition of the testator which a Court of law or equity can notice. The intention must be found in its body, and when once ascertained, cannot be altered by any other power than that which formed and expressed it in writing.

In cases of contracts, Courts of Equity act upon the conscience of a party, by compelling him to execute it in good faith, according to the intention with which it is made; but they do not assume the power of altering or reforming original agreements differently from the intention of the parties, the extent of their power is to correct any instrument, reducing it to writing, or executed to carry it into effect contrary to the true meaning and intention of the contracting parties.

In cases on wills, the executed declaration of intention made according to the forms and solemnities enjoined by law, is the standard of right by all the rules of law as well as equity, between the heir at law and the devisee, which no Court can alter, modify, construe, or reform, on any other evidence of intention, than can be collected from its words, as the testator has made and declared it. So all courts and juries are bound to take and respect it as his last will and testament, revoking all others, and passing only such estate as it professes to dispose of, or such as by construction can be brought within its provisions. We must take this will as we find it, and notwithstanding any evidence which has been received, feel bound to declare that it does not devise the property in question to the defendant. The consequence is, that your verdict ought to be for the Plaintiff, for the seven undivided ninth parts.

## GIRARD TRUSTS.

In compliance with the 24th section of the will of Stephen Girard, the Treasurer of the Girard Trusts, has prepared the following condensed Statement of the affairs of the Estate.

1st. *Stocks and Loans appropriated for constructing and maintaining the Girard College for Orphans.*

6331 shares of Stock in the Bank of the United States	664,715
8 certificates for Loans to the State of Pennsylvania	1,221,785
1 certificate for Loans to the City Corporation	113,500
	<u>\$2,000,000</u>

2d. *Stocks and Loans appropriated for the Improvement of the Eastern Front of the City and Delaware Avenue.*

3 certificates for Loans to the State of Pennsylvania	61,404 33
8 certificates for Loans to the Schuylkill Navigation Company	276,484 00
3 certificates for Loans to the Mount Carbon Rail Road Company	30,000 00
1 certificates for Loans to the Guardians of the Poor	25,000 00
22 shares of Stock in the Insurance Company of Pennsylvania	11,000 00
50 shares of Stock in the Philadelphia Insurance Company	4,166 67
100 shares of Stock in the Delaware Insurance Company	4,200 00
1 certificate for Loan to the City Corporation	87,745 00
	<u>\$500,000 00</u>

3d. *Loan appropriated to purchase Fuel for Poor White Housekeepers and Roomkeepers in the City of Philadelphia.*

1 certificate for Loans to the Schuylkill Navigation Company	<u>\$10,000 00</u>
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4th. *Stocks and Loans, comprising the Residuary Fund.*

1 certificate for Loan to the State of Pennsylvania	752 13
948 shares of Stock in the Bank of the United States	183 60
1 certificate for Loan to the Franklin Institute	800 00
2200 shares of Stock in the Schuylkill Navigation Company	264,000 00
102 shares of Stock in the Delaware and Chesapeake Canal Company	10,200 00
2 shares of Stock in the Germantown Turnpike Company	95 00
10 shares of Stock in the Schuylkill Permanent Bridge Company	130 00
100 shares of Stock in the Philadelphia Exchange Company	10,000 00
Cash received from old Bank of the United States, five extra dividends (loaned temporary to the city)	1,943 40
	<u>\$288,104 13</u>

The following Account Current exhibits a condensed Statement of the Cash Account, embracing the amount of Dividends, Interest and Rent of Real Estate received, and payments made to the various objects, for the year 1834.

## Dr.

To cash paid for repairs of Real Estate	12,143 87
the Girard College	114,077 27
appropriation for Paving	9,229 47
appropriation for Colvert, &c., at the Drawbridge Dock	2,122 05
appropriation for Stores, Dock, &c. near Schuylkill	12,529 36
appropriations for Rail road in Broad street	4,228 55
Annuities \$3,900 and in advance for 1835, \$400	4,300 00
Delaware Avenue	3,112 86
appropriation for incidental expenses	1,656 95
appropriation for taxes and water rents	10,473 42
Lands in Erie county	279 29
Lands in Schuylkill county	864 63
appropriation for Salaries the City Treasurer a temporary loan to the City	4,600 00
for Fuel for Poor Housekeepers	16,000 00
appropriation for City Police	594 18
appropriation for the use of the Trustees of the College	26,322 53
appropriation for Lands in Pennsylvania and Kentucky	1,415 99
Lands in Louisiana	1,192 15
C. P. Fox for rent of meadow in Moyamensing	1,231 14
for rent of Lot in Jones' alley, \$45, Constable Com. collecting \$19 32	100 00
	64 82
Balance in the Treasury 31st Dec. 1834	1,182 34
	<u>\$227,120 87</u>

## Cr.

By cash in the Treasury January 1st, 1834	4,899 49
received for rents of Real Estate for Interest on Mount Carbon Rail Road Loan	62,856 38
for Interest on City Loan	1,800 00
for Interest on Loan to the Guardians of the Poor	8,815 00
for Interest on Loans to the Schuylkill Navigation Company	1,250 00
for Interest on Loan to the Franklin Institute	15,076 20
for Dividend on Stock of the Bank of the United States	50 00
for Dividend on Stock of the Schuylkill Permanent Bridge Company	44,317 00
for Interest on State Loans	11 00
for Dividend on Stock in the Pennsylvania Insurance Company	56,180 68
for Dividend on Stock in the Delaware Insurance Company	880 00
for Dividend on Stock in the Schuylkill Navigation Company	280 00
for old Lumber sold from the Girard College	10,450 00
of the City Treasurer, temporary Loan returned	100 50
Interest on temporary Loans	16,000 00
for Dividends on the Stock in the Germantown Turnpike Company	2,071 05
	6 00

By cash for Lands in Schuylkill county, amount returned by the Committee	3 42
for repairs Real estate and materials	2 75
for use of a Battering Ram	53 00
five extra Dividends of Stock in the old Bank of the United States	1,943 40
Dividend on Stock in the Philadelphia Insurance office	75 00
	<hr/>
	\$227,120 87

BENJAMIN JONES, Jr.

Treasurer of the Girard Trusts.

Philadelphia, Dec. 31, 1834.

*Statement of the Estimate Amount of Income from Rents, Interest and Dividends for the year 1835.*

Interest and Dividends from the College Fund	\$102,780 00
Interest and Dividends from the Delaware Avenue Fund	25,500 00
Interest from the Fuel Fund for Poor Housekeepers	454 44
Interest, Dividends and Rents from the Residuary Fund, applicable to the City Police and Improvement of the City Property, as follows:	
Rents from Real Estate in the City	\$54,000
Rents from Real Estate in Coates' street	3,800
Rents from Farms in Passyunk and Moyamensing	6,000
Interest and Dividends from Stocks and Loans	11,000
	<hr/>
	84,800
From which is to be deducted, Annuities, Taxes, Water rents, Salaries, Repairs and Materials for Real Estate, and Incidental Expenses, estimated at	37,500
	<hr/>
	47,300 00
	<hr/>
	\$176,034 44
	<hr/>

The above Statements and Accounts have been carefully examined and approved by the Board of Commissioners of the Girard Estates.

JOSHUA LIPPINCOTT,

President of the Board.

Philadelphia, January 3, 1835.

**PHILADELPHIA BOARD OF TRADE.**

At the annual meeting of this Association, held on Friday, the 16th inst. at 7 o'clock, P.M. the President, THOMAS P. COPE, Esq. in the Chair, and

A. G. RALSTON, Esq. was appointed Secretary.

The President presented the annual Report of the Directors, as follows:

**REPORT.**

The Directors of the Philadelphia Board of Trade, in obedience to the fourth article of the Association, present the annual report of their proceedings.

The numerous subjects presented to their attention, all tending to promote the internal interests and trade of our state, have received that degree of consideration which the magnitude of the object demanded—and they hope to show by the view they will now exhibit of the

present attitude of those subjects, that the charge committed to their hands, by you, at the last election, has not been disregarded.

It cannot have escaped your notice, that it has been necessary to keep a watchful eye on the exertions of our neighbors, whose unceasing, but honest efforts, are directed to augment their trade with the interior at our expense, nor should it fail to claim our constant attention, that they are active and powerful, possessing vast resources, abundant capital, and great enterprise; these means, important as they are in securing to our rivals their full share of the trade from the great West, should not, and the Directors believe, will not produce the least effect to dampen the zeal of our own citizens in their cause, but on the contrary, will stimulate every one to embark, freely and earnestly in the noble competition, by which we trust, both ourselves and our neighbors will succeed, and thus the great interests of our common country will be essentially promoted.—Pennsylvania, however, is not to take a humble share in this great work; her situation—her wealth—her intelligence—and her experience all forbid the idea;—on the contrary, she is to lead, and continue in the possession of that trade which she has for so many years enjoyed, with a mutual benefit to herself, and the portion of country from whence it came. How, or in what manner can this great object be most speedily and effectually accomplished, is the question?

In answering this inquiry, the Board begs leave to observe, that it will be recollected, that last winter, great exertions were made, under measures emanating from the Board, to excite the attention of the Legislature of this State, to the junction of the Pennsylvania and Ohio Canals, an object, which, in the opinion of your Directors, is deemed of paramount necessity. Though success did not then (from causes which need not here be enumerated,) attend those exertions, it is still believed that a favorable impression was made on the minds of our Representatives, in relation to this important work, and it is confidently expected that an early opportunity will be embraced, at the present session, to make provision for the extension of the Pennsylvania Canal to the Ohio State line.—It will also be remembered that the original Directors of this association, appointed Delegates to the Warren Convention, to obtain information in regard to this subject, upon which reliance could be placed; and the valuable report of those gentlemen, proves, the measure to have been equally wise and beneficial. The Directors giving it their entire confidence, caused one thousand copies to be printed and distributed, and they doubt not, it has enlightened many of our fellow citizens on the subject.

The Directors after examining all the evidence before them, have arrived at a conclusion, as to a proper route for this junction, but they will not conceal from you, that their opinion, on this point, is at variance with that of several highly respectable gentlemen in Ohio.—There are two routes proposed. The one, the Mahoning, or northern; and the other, the Sandy and Beaver, or southern route; of these two, your Directors do not hesitate to prefer the former. On this subject, they have been favored with visits from friends of the latter route, and have given their statements the most respectful consideration. These have been accompanied by the opinions of the Engineers of the Company, appointed to make an additional survey of this route; but we are constrained to declare, that we do not perceive in our further investigation of this matter, any reason to change our former deliberate judgment. In confirmation of our decision, it seems to be admitted by the warmest partisans of the southern route, that artificial reservoirs of water must be constructed, should that route be adopted; and your Directors feel assured that if there be another route, on which such a resort is not required, it should have the preference. That route is believed to exist by the Mahoning Valley. The Directors are desirous that the Association should under-

stand, that all their views and feeling on this subject, are governed exclusively, by the desire to select the best route; not an individual or local feeling exists in the breast of either of them, and they feel anxious that the question should be settled for the permanent good of all parties interested; and for the furtherance of this great point, the Committee of Correspondence with the Pittsburgh and Ohio delegates to the Warren Convention have been instructed to send delegates to Columbus during the present session of the Legislature of Ohio, to endeavour to promote what the Directors believe to be the views of this Association, to obtain their co-operation with the Legislature of this State, to effect the proposed junction; for this duty, gentlemen eminently competent to the purpose have been selected, and this Board have a perfect confidence in their zeal, as well as their capacity to accomplish, as far as their influence and exertions may extend, this great object.— Attempts at Harrisburg, will also be made during the winter, which we have every reason to believe will be met by a proper spirit, and with a hearty concurrence in our views, on the part of the Legislature. Such then, is the condition of this proposed improvement.— The Directors could not say less on a subject so important; more they need not say than to recommend it to the persevering attention of this association, and particularly to those whom the association may please to select as their successors.

In February last, a standing committee, denominated the "Portage Rail Road Committee," was appointed by the Board, for the purpose of adopting such measures as they might deem proper to facilitate the transmission of merchandise over the Allegheny mountain; in the month of May, complaints were heard of delays, &c; this Committee were then instructed to investigate the facts and make report thereon; this duty was promptly attended to; and the Committee reported at the succeeding stated meeting, the circumstances which gave rise to these complaints; they were such as usually attend new and unfinished works; this report was given to you through the newspapers of the day; since that time, the Board are without evidence of delay or inconvenience from the same source, and as the Mountain Rail Road will be completed for the reception of its vast trade on the opening of the navigation of the canals, your Directors do not anticipate any disappointment another season from similar causes.

The Inspection Laws of the Commonwealth have had the attention of your Directors. You are all aware that these enactments, the expediency of which has been generally doubted, have a strong bearing upon the trade and internal improvements of our state; it will be vain that you make Rail Roads and Canals to attract and facilitate commerce within our State, if you embarrass the articles composing it with annoying exactions. It may be the wish of the Merchants or Agriculturists of the neighboring states, to avail themselves of our improvements, to send articles of their produce to such markets as they may think proper; but if we oblige them to incur extra expenses thereon, it causes the producer or merchant to seek another channel where the transportation will be free from such exaction. The importance however of preserving a high standard in the domestic and foreign markets for our own produce, is admitted; but it is believed to be the best policy to allow the produce of other states a transit through our borders, free from any further tax upon it than the cost of transportation, &c; hence it is that the Directors notice with pleasure a bill now presented to our Legislature by the Commissioners of the Civil Code, providing for the adoption of the liberal system we have suggested.

The Gauging Laws are represented to this Board, as being at variance, either as regards principle or practice, with those of other states; the effect of which is, to give other markets a decided preference over our own. Measures of correction are now in train, bearing

on this subject, which it is hoped will prove successful in restoring to the proper market, the produce to which it is entitled.

On the subject of tolls on our Canals and Rail Road, the Directors assure you of the r having given the subject great attention, and they do so the more cheerfully, as their exertions have proved in a great degree successful. It was long since ascertained that the difference of charges between New York and our own State, amounted to a bounty in favor of our neighbor; preparatory to action on this subject with the proper authorities, correct information was sought for by the Board, and we are consequently indebted to several gentlemen of the interior, for valuable, elaborate comparative statements of tolls, via New York and Pennsylvania inland routes, and the freight by the Ohio and Mississippi rivers to New Orleans. The examination of these documents resulted in an instruction to the appropriate committee to send suitable persons to Harrisburg, for the purpose of laying before the Canal Commissioners, the information obtained. This communication was received by the Canal Commissioners, in the most qualifying spirit of frankness, and as soon as their other important duties permitted, they made the new regulations reducing the tolls as much as appeared prudent at the present time, which it is believed will prove equally satisfactory and beneficial, whether as regards the interests of the state, or the owners of commodities transported. The Commissioners for this prompt attention to the wishes and interests of those deeply interested in the wise management of our internal improvements, received as they deserved, the thanks of the Board.

The Board of Directors conceiving that some further facilities were required for the transportation of merchandise to the depots at the Schuylkill river and Rail Road, from the city proper, and viewing with pleasure, similar facilities enjoyed by our fellow citizens, north and south of us, have instructed a Committee of this Board, appointed for the purpose to memorialize Councils, on the subject of causing a Tram or Railway, to be constructed from the Schuylkill to the Delaware. The Directors have not designated any particular location for its route, but being governed by a perfect regard to the interest and opinion of every individual, as also the welfare and prosperity of the whole, they merely wish to participate in any measure which shall be decided by Councils, or their fellow citizens as the most advisable.

The importance of a uniform rate of charges on the internal trade of our state, is admitted by all, and has received the action of this Board; to know the exact rates of Commission for buying and selling produce of all kinds; the rates of freight from place to place; the rates of storage for long or short time, &c. are points of information always required by those who wish to operate in the produce market; the Board have therefore considered the matter as within the scope of their duties, and have appointed a Committee to prepare a tariff of charges adapted to that branch of trade, which we doubt not will be acceptable to the Commission Merchants, and be productive of decided advantages to the trade itself: connected with this subject, is that of Insurance on the Canals and Rail Road of this State, and on the Ohio river; this is a subject of importance both to the buyer and seller, and it is hoped our exertions will be successful to effect Insurance on merchandize transported by the routes above mentioned.

You are aware that a company was chartered by the Legislature some time since, for the construction of Tow Boats, for assisting the navigation of the Delaware, when impeded by winds or currents. The books for the stock were opened, and part of the amount required, subscribed, but not sufficient to enable the company to go into operation. The fact is stated with regret, and the subject is renewed in the hope, that a spirit of enterprise will be aroused to the importance of the

subject, for it is admitted that we labour under some disadvantages by the nature of our navigation from the Capes to the city; our ships arrive at the Capes of Delaware, in passages equally short with those at N. Y. but but they have frequently to encounter an hundred miles of head winds, strong current and narrow channels; it should be recollected too, that in exact proportion to the extent of these delays, be they what they may, our neighbors gain all the time, and too frequently much of the freight. It therefore, behooves us, to take such measures as shall secure to our ships and our importers their proper share of foreign commerce, and give to our accumulating exports the readiest despatch. The subject is in the hands of a Comm ttee, and we ardently hope for the final success of our newly awakened efforts, without which the great design of our past exertions in respect to our interior trade, will be but imperfectly fulfilled.

The Board are favored by several members of the Legislature, with public documents from time to time, which are always laid on the tables in the room, for the use of the members of the Association; national State and City Maps are also placed on the walls for their use. The Treasurer herewith presents his annual account current. Having thus presented the leading subjects which have engaged the attention of your Directors for the year past, we cannot conclude this report, without congratulating the Association, on the successful result of its operations thus far; a result which has fully realized the expectations of its projectors, and furnishes the strongest indication of its increasing utility hereafter.

Philadelphia, Jan. 16, 1835.

The Board then proceeded to the annual election of its officers, and the following gentlemen were chosen.

<i>President,</i>	
Thomas P. Cope.	
<i>Vice Presidents,</i>	
Matthew Newkirk,	Robt. Toland.
<i>Treasurer,</i>	
Thomas C. Rockhill.	
<i>Secretary,</i>	
Lewis Walm.	
<i>Directors,</i>	
Caleb Cope,	Davis B. Stacy,
John S. Riddle,	Samuel Comly,
Wm. H. Hart,	George W. Toland,
William R. Thompson,	Stephen Baldwin,
M. D. Lewis,	Edward Yarnall,
Thomas P. Hoopes,	Charles S. Boker,
Richard D. Wood,	Joseph W. Ryers,
Alexander Read,	Alexander McClurg,
Edward Roberts,	William Yardley, jr.
Robert Patterson,	M. Canby,
Frederick Fraley,	

*To the Select and Common Council of the city of Philadelphia.*

The memorial of the Philadelphia Board of Trade, respectfully sheweth:

That the State having completed a Canal and Rail Road communication between Philadelphia and Pittsburgh, by means of which the inexhaustible products of the west may be brought to the vicinity of the business part of the city, your memorialists believe that some arrangements should be made to convey those products with the least possible expense, from the termination of the canal and rail road to the river Delaware, and also to facilitate the transportation of merchandize destined for the interior.

The present mode of conveyance is acknowledged

by every one to be too expensive; and when your memorialists state the fact, that the present price of drayage on the heavy produce of the country, from the Schuylkill to the Delaware, is equal to one third the freight on the same articles from Philadelphia to Boston or Charleston by water, or from Lancaster to Philadelphia on the rail road, they think it obvious that a remedy should be provided if it can be accomplished without detriment to the comfort and convenience of the citizens.

Your memorialists would therefore respectfully suggest the propriety of laying a single or double track of Tram or Rail Ways from the river Schuylkill through a central part of the city to the river Delaware. This would in their opinion reduce the present price of transportation to and from the Schuylkill at least 75 per cent; and by the Columbia Rail Road to comparatively nothing.

Your memorialists believe, and are confirmed in this by the opinion of a scientific and experienced engineer, that Tram ways, or solid pieces of hewn granite of proper proportions, laid perfectly level with the surface of the street, would be most advantageous, as they would not only answer all the purposes of a rail road, but be a decided improvement on the present mode of paving the streets and prove economical; as when once judiciously laid they would probably last for ages; and by a slight change in the present manner of constructing the wheels, Rail Road Cars could be used with the same advantage on the Tram as on the rail way.

It is believed that no opposition would be made by the citizens resident on the streets through which Tram ways may be constructed, as they are not liable to the objections generally made to rail roads, the surface being level with the street and smooth; they would obviate in a great degree the noise occasioned by the passing of carts, omnibuses and other vehicles on the main thoroughfare of the city.

Your memorialists believe also, that to preserve a fair proportion of the Western Trade, it will be necessary by some means, to continue the Columbia Rail Road through the city to the river Delaware, and as our enterprising neighbors of the districts, have already conducted branches to their wharves—every hour of delay on our part is a serious injury done to the commerce of the city proper.

THOMAS P. COPE, President.

J. M. Wright, Secretary.

From the Rochester Democrat.

#### OLEAN AND ROCHESTER CANAL.

A memorial is in circulation, in New York, praying the Legislature of that state to execute this work.—It is published in the Rochester Democrat, of last Tuesday. The following are extracts—

“That we solicit your Honorable Body to pass a Law ordaining the construction of a canal from Rochester along the great Valley of the Genesee, to Olean, on the head waters of the Allegheny River.

In addition to our former applications for this measure, we are invited to call your special attention to the subject, at this time, by reason of a recent survey made of the route, under an order of the last session of the Legislature; which, although accomplished, yet we have not been able to obtain any specific knowledge of the result; and, therefore, we have to speak of it from our general knowledge of the country, and that which we have derived from the former surveys thereof.

From all those, we have no doubt of its feasibility.—The question, therefore, resolves itself solely into the policy of the measure,

In this respect, it would form a continuous line; another link, or lateral branch, of the many already added to the great TRUNK of the New York Grand Canal; going onward to use up the waters of her numerous rivers and small lakes with which the State abounds, into ca-

nals and the feeders of canals; and to extend her system of internal navigation, trade and commerce, through all the various sections of her territory.

This canal would extend an hundred miles, from Rochester to Olean, and have a transverse width of territory from 15 to 20 miles on either side, and comprehend about two millions of acres, embracing the celebrated flats of the Genesee Valley, and the adjoining uplands, equally famed for the culture of wheat, together forming as champaign and fertile soil, as is any where to be found under the same parallel of northern latitude.

Besides the large amount of agricultural productions that would wend their way to market on the bosom of its waters; its southern extremity would reach into a large range of Pine Timber, from which the counties of Livingston and Monroe are already mainly supplied with building materials; and, by following the head waters of the Allegheny River, 30 miles from Olean, would reach the bituminous coal mines lying in great abundance along the western slope of the Allegheny Mountains.

As the lateral branch of the Erie Canal, it will be fully equal with any other lateral branch, yet constructed by the State, both for its productive revenue—for including its long reach on the Erie Canal, to tide waters, it could not fail to pay the interest on the cost of its construction after the first or second year of its use—and for the diffusion of its benefits over its adjacent territories, as well as for extending its supplies of lumber and fuel along the whole line of the Erie Canal to Albany, and probably even to the New York market, in competition with other lumber and coal regions.

Therefore, viewed merely as a lateral branch canal, terminating at Olean, we consider it as being adequate to the cost of its construction—yet, this view is but a limited and partial exhibit of its importance.

For, by extending its improvements down the Allegheny River, either by a canal along its banks, or by dams across the river for a slack water navigation, until a sufficient size and depth of that river could be gained for a regular and durable steam boat navigation thereon to Pittsburgh, (besides the minor consideration of enhancing the value of the 100,000 acres of land lying along the waters of that river, granted as a gratuity to the canal fund of the State, by the Holland Land Company,) it could be made, perhaps the best, at least, one of the openings of a communication with the Ohio river, to let the State, and its great emporium, the city of New York, into a participation of the trade of the great Ohio Valley, in competition with the cities of Philadelphia, Baltimore and Washington.

In the great work which Pennsylvania has encountered in order to overcome the high altitude of the Allegheny Mountains, she has had to resort to the alternate use of canals and rail roads. In her experiment on their capacities for the transportation of heavy and bulky articles, she has found that canals are nearly four times as efficient, as are Rail Roads—i. e. the cost of transportation on canals are as 15 to 59 on Rail Roads. This experiment being made where both were under the equal management of the same public officers, settles the pending controversy respecting their comparative merits, most conclusively in favor of canals; and forms a highly valuable result for the benefit of New York, as she can carry an open canal through all the principal sections and portions of her territory; and serving to fasten on her, as a fundamental measure of her state policy, to hold on to the right of making all her canals as *her state property*; and not to grant away the right, to incorporations.

#### PENNSYLVANIA CANAL AND RAIL ROAD.

EXTRACT OF A LETTER, DATED

Hollidaysburg, Jan. 2, 1835.

The stationary engines on the Portage were stopped on the night of the 31st December, by order of the

Principal Engineer. On the afternoon of that day two trains of cars came to this place from the mountain, the last for the season. The navigation closed at this place on the 30th. It was still open at Johnstown on the morning of the 30th, and two boats were expected to arrive from Pittsburgh before its closing. The snow is about 5 inches deep on the mountain, and two or three inches deep at this place.

[NOTE.—At Harrisburgh the snow fell to the depth of 22 inches on the 29th of December, and since then there has been hard freezing. The Susquehanna is closed by ice.—*Chronicle.*]

From the Commercial Herald.

#### ARRIVALS

*At the Port of Philadelphia during the year 1834.*

The following statement we have made up from the entries on the Custom House Books.

	Ships.	Barks.	Brigs.	Schooners.	Sloops.
January . . . . .			13	22	3
February . . . . .	5		23	33	13
March . . . . .	9	1	46	93	31
First Quarter . . . . .	14	1	82	150	47
April . . . . .	7	4	46	123	52
May . . . . .	7	2	44	156	41
June . . . . .	8	5	43	307	82
Second Quarter . . . . .	22	11	133	586	155
July . . . . .	11	1	55	281	74
August . . . . .	6	2	67	245	58
September . . . . .	6	2	43	204	46
Third Quarter . . . . .	23	5	165	730	178
October . . . . .	10		30	222	45
November . . . . .	5	1	46	229	43
December . . . . .	8	2	38	118	17
Fourth Quarter . . . . .	23	3	114	569	105

#### RECAPITULATION.

First Quarter . . . . .	14	1	82	150	47
Second Quarter . . . . .	22	11	133	586	155
Third Quarter . . . . .	23	5	165	730	178
Fourth Quarter . . . . .	23	3	114	569	105
Total . . . . .	82	20	494	2035	485

Making the whole number of arrivals during the year 3116. In this statement is included the arrivals on the Schuylkill amounting to 693 Brigs, Schooners and Sloops.

The arrivals of Vessels belonging to Foreign Countries during the year 1834, have been as follows:—

British . . . . .	73	Bremen . . . . .	1
French . . . . .	2	Swedish . . . . .	1
Spanish . . . . .	12	Danish . . . . .	1
Portuguese . . . . .	1	Dutch . . . . .	1

American vessels from foreign ports 338

Total 430

Of these vessels there were—

Ships.	Barks.	Brigs.	Sch'rs.	Total.
62	19	226	123	430



## INSPECTIONS OF FLOUR AND MEAL.

At the Port of Philadelphia from the first of January 1834, to the 31st December inclusive.

Wheat Flour	309,576 barrels.
do do	15,300 half do.
Middlings	2,339 barrels.
Rye Flour	31,173 do.
Corn Meal	5,797 hlds.
do do	31,173 barrels

B. DAVIS, Inspector.

Jan. 3, 1835.

During the year 1833 the Inspections were—

Wheat Flour	378,590 barrels.
do do	22,725 half do
Middlings	2,577 barrels.
Rye Flour	40,011 do.
Corn Meal	7,549 hlds.
do do	40,415 barrels.

From the above statements it will be seen that the Inspections this year have fallen off 69,020 bbls and 7,424 half barrels in Wheat Flour; 8,838 in Rye Flour, and 8,838 barrels in Corn Meal.

*Commercial Herald.*

From the Bucks County Intelligencer.

## PUBLIC MEETING.

At a meeting of the citizens of Bucks county, held in pursuance of public notice, at the house of W. W. Baldwin, in Newhope, on Saturday evening 31 January 1835, to take into consideration the agreement made by the Commissioners of Pennsylvania and New Jersey, for the use of the waters of the Delaware for canal navigation; when Moses Eastburn was called to the chair, and Isaac Vanhorn and Rutledge Thornton appointed Secretaries.

The object of the meeting having been stated, on motion a committee of five persons were appointed to draft resolutions and a petition expressive of the sense of the meeting, whereupon the following persons were appointed, viz.—Lewis S. Coryell, Mahlon Briggs, John Dolby, Jos. D. Murray and William Cooner; who, after some time, reported the following preamble and resolutions, which were unanimously adopted.

That the Delaware division of the Pennsylvania canal has been completed along the valley of the Delaware, from tide water to Easton, at an expense of \$1,500,000, under the direction of the Commonwealth. From the immense trade destined to be borne on this canal, and the inexhaustible coal region on the Lehigh, leaves nothing to conjecture in relation to the revenue to be divided from this item of Internal Improvement, if kept in navigable condition.

A great error was committed by the Engineer, who located the canal. The top water line with five feet depth in the  $8\frac{1}{2}$  mile level, immediately below Wells' Falls, is 2 feet 9 inches above the extreme low water at the head of those Falls. Water wheels have been erected to supply the deficiency; the past season, has proved their inadequacy, nor does it seem reasonable that such important navigation, should be dependent on such a precarious contingency, when a permanent and certain supply of water may be had without material injury to any one, and so beneficial to the revenue of the Commonwealth, and prosperous to individual enterprises.

Commissioners have been appointed by the States of Pennsylvania and New Jersey, to make an amicable arrangement for the use of the waters of the Delaware, for their respective canals. They have with great deliberation and personal investigation, and a due regard to the ascent of fish, and the safe descent of rafts, concluded arrangements mutually advantageous.

One of the provisions allows Pennsylvania to erect a dam at Wells' Falls, three feet high across the river,

except in the channel where an opening of sixty feet to be left free and clear, and such other fixtures made as to render certain, a sure and safe downward navigation. Free locks are to be erected below the falls, for the ascending crafts. Thus ending the long agitating and excited differences in regard to the use of the waters of the Delaware between their respective States.

Therefore Resolved, That we cheerfully submit to any arrangements, by which the revenue of the Commonwealth can be promoted, and the navigation of the bed of the Delaware unimpaired.

Resolved, That the dam across the Delaware, from shore to shore, five feet high, below the mouth of the Lackawaxen, without any opening, and to feed a canal in the State of New York, and over which nine-tenths of all the lumber passes in descending the Delaware, yearly, leaves no room to doubt the propriety of Pennsylvania erecting a dam three feet high, with an opening of 60 feet, at Wells' Falls, to feed her own canals—particularly if the navigation is benefitted by this proposed plan of improvement.

Resolved, That we approve of the agreement entered into by the Commissioners of the States of Pennsylvania and New Jersey, relative to the use of the waters of the Delaware, for canal purposes believing that the arrangements improve both the descending and ascending navigation, and particularly at Wells' Falls, by which the raftmen will be relieved from a heavy tax imposed by steersmen, for piloting them through those Falls.

Resolved, That when this meeting adjourns, it will adjourn to meet again on the 12th of January, at this place at 7 o'clock in the evening.

Resolved, That the proceedings be signed by the officers of the meeting and published in the papers of the county, and such others as may feel friendly.

MOSES EASTBURN, Chairman,

Attest,

ISAAC VANHORN, }  
RUTLEDGE THORNTON, } Secretaries.

The citizens of the County of Bucks, are requested to assemble at the House of W. W. Baldwin, in New Hope, on Monday 12th inst, at 1 o'clock, P. M. to take into consideration the agreement of the joint commissioners of Pennsylvania and New Jersey, relative to a dam across the Delaware river, at the head of Wells' Falls.

## LANCASTER COUNTY.

There has been much valuable property for sale in Lancaster county during the present season, and at the present time: and instead of this fact being an evidence of distress, the attending circumstances prove it actually the reverse.

Property valued at upwards of two millions of dollars has changed proprietors within the last four months, some by private sale and much of it by public sale, bringing astonishing prices and principally for cash, and all without the intervention of the sheriff.

The prices of farms, in the valley, have varied from 85 to 110 dollars per acre, at public sale, payable principally in cash, in hand, or on the first of April next. These have varied in size from 50 to 250 acres—the quantity of land having no effect in diminishing the price.

From the immense number of farms that have been sold, and the number now up for sale, those who are not acquainted with purchasers and sellers, would imagine that there was a great migration from this county for the West, and a proportionate influx of strangers. This is not so. The buyers are generally Lancaster county born, wealthy farmers, who first purchase large farms with the accumulation of industry, and part with their small ones to one of their children, or to those who are beginning life, or advancing on the road to

competence. The instances of migration are not more, nor indeed so great as in less prosperous times; and we observe that there is a growing desire in those who are about to remove, to settle in the neighbouring counties where lands are cheaper than with us, in preference to the far west. This we are glad to see, as it argues the increase of a prudent foresight which can calculate upon finding happiness and comfort near home and near friends and connections, as well as afar off, among strangers. The county of Cumberland, Franklin, and those bordering on the Juniata and West Branch of the Susquehanna, may calculate upon a considerable increase of wealth and population from the redundancy of Lancaster county.—*Lancaster Paper*.

From the Beaver Argus.  
BEAVER COUNTY.

We have been furnished by a friend with the following statement, showing the amount of taxable property in the several townships of this county. It will no doubt be interesting to our readers. The aggregate is much larger than we had anticipated, and shows the increasing wealth, and importance of this section of the State.

A Statement of the Valuation of Taxable Property, Real and Personal, in the several townships of Beaver County, according to the assessment for the year 1835.

Townships.	Valuation.
Borough	\$199,911
Fallston	139,065
New Sewickly	320,919
North Sewickly	374,416
Shenango	211,405
North Beaver	129,552
Big Beaver	129,552
Little Beaver	259,926
South Beaver	76,581
Brighton	121,566
Ohio	132,521
Green	142,284
Hanover	187,273
Racoon	57,614
Moon	85,254
Hopewell	146,543
Economy	171,651
Chippewa	71,502
Total valuation,	\$3,041,011

**BEAVER BRIDGE.**—The Big Beaver Bridge has lately been so altered and improved as to add to its value, security, and the public convenience. Originally the eastern end of the structure run so far into the hill, that it was almost impossible to cut a road through the rock at a proper angle. A new abutment has been built, and about forty feet of the eastern span cut off which gives room for roads up and down the creek, and makes the ascent directly up the hill at an easy elevation. The road now is properly graded and greatly improved. The cost of this alteration is about \$4000.—*Beaver Argus*.

From the Philadelphia Gazette.

RECORD OF THE WEATHER—PHILADELPHIA.

**THE COLD WEEK.**—The week which commenced on the 3d of January, and ended on this day the 10th, will long be remembered in the annals of Philadelphia, as the coldest period of seven days, within the recollection of most of our inhabitants.

The following statement gives the temperature as shown by a thermometer, in the centre of the city, under a piazza, exposed to the South, near the corner of Walnut and Seventh streets, at half an hour before sunrise of each day.

Sunday,	4th	4° above zero.
Monday,	5	3 " "
Tuesday,	6	20 " "
Wednesday,	7	6 " "
Thursday,	8	5 " "
Friday,	9	7 " "
Saturday,	10	12 " "

Making the average for the week of a little over 8 degrees.

The following memorandum, for the same period at 7 A. M. is furnished by a respectable citizen residing at the corner of Walnut and Ninth streets, the thermometer being exposed to the N. E. and partially to the N. W.

Sunday,	4th	zero.
Monday,	5	1° above.
Tuesday,	6	21 " "
Wednesday,	7	3 " "
Thursday,	8	2 " "
Friday,	9	5 " "
Saturday,	10	11 " "

In addition to these statements we have received the following communication from another respectable citizen, who resides in Chestnut street near Broad street.

PHILADELPHIA, Jan. 10, 1835.

Gentlemen.—It is with pleasure that I comply with your request, by sending you an account of the mercury in Fahrenheit's thermometer, since Saturday, the 3d inst. viz.—

Sunday, January 4,	at 6 o'clock,	2 degrees below zero.
Monday,	5,	" 4 degrees below zero.
Tuesday,	6,	" 13 above zero.
Wednesday,	7,	" 2 degrees above.
Thursday,	8,	" 1 degree below zero.
Friday,	9,	" 10 degrees above zero.
Saturday,	10,	" 8 degrees above zero.

It will be recollected that zero, or 0, is 32 degrees below the freezing point.

My thermometer hangs outside my chamber window (the year round) facing the North, and as I constantly keep a night lamp burning, I can always tell the exact state of the atmosphere, at any hour in the night, by throwing up my window and looking at what point the mercury stands. It is more than forty years since I commenced making thermometrical observations, and the instances have been exceedingly rare, that the weather has continued so intensely cold for so many days in succession. If there had been a large body of snow upon the ground, in this city, the mercury would probably have sunk several degrees lower. At the N. and E. where the mercury has been so unprecedentedly low, there are large bodies of snow and ice.

Very respectfully,

CHARLES PEIRCE.

Chestnut, between 13th and Broad streets.

**THE WEATHER.**—The continued severity of the weather, occupies the attention of every body. Last evening, our thermometer stood thus, with a southern exposure.

5 P. M.	21°
7	17½
10	13½

This morning at 7 o'clock it was 5 and at 9 o'clock at 3 degrees.

At the Exchange, this morning at 7 o'clock it was at 3 degrees.

We have conversed with a gentleman who was at Lancaster on Monday morning, the 5th inst, and saw the thermometer at 8 o'clock, A. M. at 12 degrees be

low zero. He says, the snow was 20 inches deep and that the atmosphere at the hour above mentioned was filled with frozen vapour resembling snow.—*Id.*

**THE WEATHER**, since Saturday, the 3d inst. has been severely cold. Sunday morning the 4th, the Mercury in Fahrenheit's Thermometer, was *two* below zero. On Monday morning, *four* below. On Tuesday morning *ten* above. On Wednesday morning at only *two* above, and severely cold through each day.

Thursday morning, at six o'clock, the mercury stood at one below 0, and at 9 o'clock only *three* above.—Friday Jan. 9, at 6 o'clock in the morning, the mercury stood at 2° above 0, and at 10 o'clock, 10 above 0.—*Id.*

From the U. S. Gazette.

**THE WEATHER.**—It is now one week since the cold weather commenced, and it will be long remembered as the cold January!

Friday, January 6th, 5 o'clock in the morning, Miss Mercury rested at 2 degrees above zero, and at 10 o'clock, 10 above 0, at which time she took the responsibility and in defiance of the General rose to 22 above 0.

As there are many persons who will no doubt preserve your paper of the present week, as references, I will here give the state of the Mercury every morning at 6 o'clock since last Saturday, viz.

Sunday, January 4, 1835—Mercury 2 below zero.

Monday, " 5, " " 4 " "

Tuesday, " 6, " " 13 above "

Wednesday, " 7, " " 2 " "

Thursday, " 5, " " 1 below "

Friday, " 9, " " 2 above "

Zero, or 0 mean the same, and is 32 degrees below the freezing point. At 40 below mercury will freeze.

**THE WEATHER.**—A gentleman called in yesterday to say that he had just returned from the northern part of Chester County, where, on Sunday morning, at a quarter before 8 o'clock, the Mercury in the thermometer stood at 10° below zero, and on Monday morning at the same time, it was 12° below zero.—*Id.*

**THE WEATHER.**—The Mercury on Saturday morning last, (Jan. 10.) at 6 A. M. stood at 8 above 0 at 9 o'clock 14 above 0 after which it gradually rose to 20 above 0. Jan. 11, Sunday morning, 6 o'clock, Mercury 18 degrees above 0, and at 9 o'clock 25 above; after which it rose to 35, which is three degrees above freezing.

Jan. 12. 6 o'clock, A. M. Mercury 19 above 0, and at 9 o'clock 22 above 0.

*Chestnut st. near the Mint.*

From Poulson's American Daily Advertiser.

State of the thermometer as registered at sunrise, at the Union Canal Office in North Lebanon, Pennsylvania, during the late severe weather.

January 4 Sunday, 13° below zero.

5 Monday, 20 below zero.

6 Tuesday, 14 above zero.

7 Wednesday, 00 at zero.

8 Thursday, 11 below zero.

9 Friday, 14 below zero.

10 Saturday, 12 below zero.

W. L.

Jan. 13, 1835.

At Pine Grove, Schuylkill county, the thermometer stood at 32° below zero, at 7 A. M. on Monday the 5th.

Jan. 4, 3 o'clock, P. M.—15 deg. below zero.

5, " 10 " "

6, " 26 " "

7, " 26 " "

8, " 24 " "

9, " 22 " "

10, " 22 " "

11, " 32 " "

The cold weather continued with but little abatement until Sunday, when by a conjunction of the Moon with Jupiter on Saturday night, the temperance of the atmosphere became more agreeable on Sunday. Without the intervention of the planet Jupiter the cold weather would have continued without intermission.—*LANCASTER JOURNAL.*

The Lancaster Union, of Tuesday says:—**THE WEATHER.**—Yesterday and day before it was intensely cold. At 7 o'clock yesterday morning, the thermometer stood at 20 degrees below zero. The Susquehanna is entirely closed at Columbia. The snow is more than a foot deep, and sleighing never was better.

In Salem, N. J. the Mercury stood on Monday at 14° below zero.

MILTON, Jan. 8, 1835.

The Weather, on the two first days of this week, was intensely cold—the thermometer having stood at 31 degrees below zero on Monday morning—and since then, up to the time when our paper went to press, it has not been so cold by several degrees.—*S. Advocate.*

Jan. 10th 1835.

**THE WEATHER.**—During the present week the weather has been intensely cold. On Monday last the thermometer stood at 31 degrees below zero. Yesterday morning we felt the cold equally as severe as on Monday.—*Miltonian.*

From the Columbia Spy.

Saturday, Jan. 10. 1835.

**COLD WEATHER.**

We believe none of our citizens recollect experiencing more severe cold than that of Monday last. The general impression appeared to be that previously the air had never been in such a frigid state in this region. A number of stage drivers who were exposed had their hands, feet, ears, &c. bitten by the frost; and the amount of suffering endured by the poor and destitute must have been great. A friend has favored us with the condition of the thermometer, as follows:

Saturday, Jan. 3d, 1835.

12 o'clock at night—13 deg. above zero.

Sunday, Jan. 4th.

3 P. M.—11 deg. above zero.

5 " 7 " "

6 " 5 " "

9 " 3 " below zero.

10 " 6 " "

11 " 7 " "

12 " 8 " "

Monday, Jan. 5th.

7 A. M.—18 deg. below zero.

9 " 11 " "

Friday, Jan. 9th.

6 A. M.—10½ deg. below zero.

On Monday morning the Susquehanna, which had been partially frozen over, presented one unbroken field of ice, which by this time must be of considerable thickness.

Sleighs crossed on the ice yesterday.

At Albany, on Sunday morning the thermometer was thirty-two degrees below zero. At Boston, on Saturday, it was 15 deg. below zero. At New York, on Wednesday, the thermometer was 18 deg. below zero.

POTTSVILLE, Jan. 10.

**COLD WEATHER.**—The weather has been intensely cold throughout the greater part of the present week. On Monday morning last the mercury fell in Fahrenheit's Thermometer as low as twenty four degrees below zero, and on the day preceding (Sunday) from seventeen to twenty degrees below zero; since which the weather has not been so cold, though the mercury on several mornings has been below zero—yesterday morning seventeen degrees below zero. It must be remembered abroad that we have a deep snow lying upon and covering the ground, and that consequently there can be no radiation of heat from the surface, the rays of the sun falling and making little impression upon the bleak covering or mantle extending in every direction. No weather like that of the present week has been ever before experienced in this part of the country within memory. The extreme cold weather of the present winter will either go far to shake the theory of a progressive melioration of climate, or will be held in after times as a remarkable exception to the general tendency of our climate. On the whole, it must be looked upon as an extraordinary phenomenon when the mercury falls 24 deg. below zero, and quite beyond the range of the calculations or predictions of Almanacks.—*Miner's Journal*.

**THE WEATHER.**—State of the thermometer at the State Capitol the present week.

		Sunrise.	1 P. M.	Sunset.
Sunday	4th	00	12	13
Monday	5th below	9 zero	11	14
Tuesday	6	9	25	25
Wednesday	7	5	14	18
Thursday	8	3		

*Harrisburg Chronicle.*

**THE WEATHER.**—State of the thermometer at the State Capitol, Harrisburg.

		Sunrise.	1 P. M.	Sunset.
Monday	5	*9	11	15
Tuesday	6	9	25	25
Wednesday	7	5	14	18
Thursday	8	3	12	15
Friday	9	*5	15	18
Saturday	10	*3	19	23
Sunday	11	7	26	29
Monday	12	7	22	30
Tuesday	13	26	41	42
Wednesday	14	36	44	47
Thursday	15	32	45	45
Friday	15	39	42	41

\*Below zero.

Wind from the North ten days in succession and unusually clear—shifted to the S. E. on the 12th—On the 15th thick fog in the morning and rain in the evening—On the 16th wind from the West and cloudy—On the 17th Thermometer at 32 in the morning; during the night the mercury in the Barometer rose three tenths of an inch.

The Susquehanna presents the appearance of a mirror, and numerous youth are enjoying themselves on skates in front of the Capitol.—*Id.*

Jan 6.

The weather has been severe and intensely cold during the last two or three days. At 8 o'clock on Sunday morning, the thermometer stood at zero, and on Monday morning at 9 degrees below.—*Id.*

On Monday the 29th ult. snow fell in this place to the depth of 20 inches, which has, up to this time, afforded excellent sleighing. At present the prospect is favorable of its continuance.—*Id.*

The canal continued in navigable order until the 29th of December.—*Id.*

**THE WEATHER.**—On Saturday, 3d inst. in Portland, Maine, and Salem, Massachusetts, the mercury at sunrise sunk to 3° below zero. The Portland Courier of that evening says—"Our harbor has to-day been shot over with ice, which occurs only once in several years."

Brigg's Bulletin, kept at the Mechanic's Reading Room, Boston, gives the following record.

Boston, }  
Sunday evening, Jan. 4. }

The thermometer at sunrise this morning stood	15° below zero.
At 8 o'clock,	11 do
At Worcester this morning,	19 do

Our inner harbor is entirely closed, and much floating ice below. Several vessels have attempted to get up, but were obliged to come to anchor.

The Chelsea ferry boats got up their steam in order to make their usual trip this morning, but were unable to proceed.

The Boston Morning Post of Monday says—"the harbor is frozen over down as far as Fort Independence, three miles from the city.

At Portsmouth (N. H.) on Sunday morning the mercury stood at twenty degrees below zero—this is one degree lower than ever before noted. In January, 1810 it sunk to nineteen degrees, which was then ascertained to be the coldest night ever known there.—Portsmouth harbor was never frozen over, and probably never will be.

At Saco, Maine, 28 degrees below zero.

At Salem, on Sunday morning, 17° below 0; on Monday, 6 below. The whole of the inner harbor is frozen over.

At New Haven, Connecticut, on Monday morning the mercury stood at 23 degrees below zero, which was colder than had been known there since 1780. There was also a very unusual body of snow upon the ground, averaging about 18 inches deep. The harbor was frozen over, but the steamboats were able to work their way through.

At Hartford, the thermometer, at 7½ on Sunday morning, stood at 25 degrees below zero; 8½, at 23 degrees below; at 9 P. M. 15 degrees below; and on Monday morning, at 27 degrees below.

At Norwich, Monday morning, 24 below cypher, 5 degrees colder than ever recorded.

A letter from the Postmaster at Goshen, N. Y., states that on Monday, the thermometer, at 7 A. M. stood at 32 degrees below zero; at 9 A. M. it was 10 degrees below zero.

At Newark, on Monday morning, the thermometer stood at 13 degrees below zero. On Sunday morning, 7 degrees below zero.—*Poulson's Am. Daily Adv.*

**CHESTER COUNTY BEEF**—On Thursday, the 1st day of 1835, six head of cattle, owned and fed by Enoch Dickson, of Kennett township, were weighed at Kennett Square, in the presence of a considerable number of farmers from the neighboring township. We are much indebted to a friend, who has politely furnished us with their respective weights.

1st weighed	2562 pounds.
2d do	2534 do
3d do	2499 do
4th do	2296 do
5th do	2240 do
6th do	2044 do

*Village Record.*

The Delaware River opened on Thursday.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.--NO. 5.

PHILADELPHIA, JANUARY 31, 1835.

No. 369.

## PENNSYLVANIA AND OHIO CANAL.

Report on the subject of the Pennsylvania and Ohio Canal.—Presented in the Senate, Dec. 31, 1834.

By Mr. KING.

Mr. King, from the select committee, to which was referred the memorial of the Pennsylvania and Ohio Canal Company, and so much of the unfinished business of the last session, as relates to a bill further supplementary to an act entitled "An act to provide for the internal improvement of the State of Ohio, by navigable canals," having carefully examined the subjects, respectfully submitted the following

### REPORT:

That said company was incorporated by the Legislature of Ohio, in 1827, to which act of incorporation, the assent of the Legislature of Pennsylvania was subsequently given, for the purpose of constructing a canal from "such suitable point on the Portage summit of the Ohio Canal, as the Ohio Canal Commissioners should direct, to the waters of the Mahoning river, and from thence to intersect the Pennsylvania, or Chesapeake and Ohio Canal, at or near the city of Pittsburgh, with liberty, in case that either of said canals should be continued from Pittsburg down the Ohio river, and up the Big Beaver, towards Lake Erie, then to intersect either of said canals, constructed as aforesaid, at the most suitable and convenient point," thus securing to the public, by the conditions of the charter, an unbroken canal communication, from the Ohio Canal to the main line of the Pennsylvania Canal, and, through that line, to the city of Philadelphia, interrupted only by the short Portage rail road, across the Allegheny ridge, about thirty eight miles in length. That owing to this uncertainty, as to the point of intersection with the Pennsylvania canal, and witnessing the steady progress which the State of Pennsylvania was making, in extending her improvements towards the Ohio Canal, the company have hitherto deemed it their duty to postpone the opening of books for subscription of stock.

The State of Pennsylvania has now completed her canal, from Philadelphia to Pittsburg, including the rail road referred to, and from the mouth of the Big Beaver up to New Castle, and within about eight miles of the Ohio State line; which has reduced the distance, by which this extended line of canal can be united to the Ohio Canal, through the Mahoning valley, to about 85 miles, according to Mr. Dodge's survey.

The Canal Commissioners of Pennsylvania, in their report to the Legislature, at their last session, also say, "they have no hesitation, in recommending the further extension, of the Beaver division, to the Ohio State line, at the expense, and for the benefit of the commonwealth," which would still further diminish the length of this junction canal, to less than 76 miles; the entire line of which, has been carefully surveyed, under the direction of the Canal Commissioners of Ohio, and the estimated expense given in detail, amounting to \$764,372, of which estimates, the canal commissioners, in their special report upon this subject, to the last Legislature, say "the prices affixed to the different items of work, in these estimates are believed to be liberal, and so far as our experience enables us to judge,

they will be found sufficient to cover the cost of the work."

In speaking of the importance of this connection, the Canal Commissioners of Pennsylvania in their late report before referred to, observe: "That a cross cut canal from Akron, on the Ohio Canal, along the valley of the Mahoning, to the Pennsylvania Canal, would, in the opinion of the Canal Commissioners, be highly beneficial to both States. It would open a direct, safe, cheap and expeditious channel, for the citizens of Ohio, to send their agricultural productions to a market on the seaboard, and enable them, in return, to receive merchandise from the east. It would, by the additional commerce thrown upon the Pennsylvania and Ohio Canals, give activity to trade, employment to capital, and business to merchants, traders, and boatmen; and, consequently, it would stimulate and promote the great primary interests of agriculture. Punctuality is said to be the life of business; but to be punctual to engagements, requires *certainty* in the means by which those engagements are to be fulfilled. Therefore, in a contest for the rich trade of the west and northwest, we should, if possible, avoid all risks and delays, and consequently broken voyages, that may arise from either floods or low water, by having a continuous canal, from the Allegheny mountains to Lake Erie and the Ohio river, below its principal obstructions."

The Canal Commissioners of Ohio, in the report made to the Legislature at the last session, also remark, that,

"The proposed work will remove the only remaining obstruction, which exists in the way of a direct commercial intercourse between the interior of Ohio, and the great commercial marts of Philadelphia and Baltimore. A free access to these cities, will open to our citizens a choice of markets, and create a competition between these cities and New York, for supplying the western country with goods, which must necessarily operate to the advantage of the western people. It will also open a direct channel of commerce, between Lake Erie and the other upper Lakes, on the one hand, and Pittsburg; and, by means of the Pennsylvania Canal, with the ports of the Delaware and Chesapeake, on the other. We need not here give a detailed view, of the advantages resulting to the immense region of country bordering on these Lakes, from a choice of markets, as well as from thus being enabled to avoid the delay in reaching the seaboard, through the New York canal, by the long continuance of the ice in the eastern end of Lake Erie in the spring. Nor is the country adjacent to the Ohio river, and its navigable branches, below Portsmouth, less interested in the proposed work, than the Lake country. A large proportion of the goods, procured for the supply of the western country, are now purchased in the cities of Philadelphia and Baltimore, and this will, probably, to some extent, continue to be the case. Most of these goods are brought to Pittsburg or Wheeling, and sent from thence, down the river by water. When the Ohio river, above Portsmouth, is too low to permit the navigation of steam boats, of a medium size, the transportation of goods down the river is attended with much expense, and great liability to loss or damage. Should the proposed improvement be made, these evils would, in a

great degree be avoided; a safe and convenient canal navigation, would thus be formed, from Pittsburg to Portsmouth, not liable to be interrupted, for any considerable time, except by ice in the winter. And below Portsmouth, a small class of boats can, at all times, ply with safety.

"The board entertain the confident belief, that, should the proposed communication be effected, a large proportion of the foreign goods, and of the heavy articles, manufactured at Pittsburg, which now descend the Ohio, would in that event, pass through our canal from the junction of the proposed Pennsylvania and Ohio Canal, to Portsmouth, particularly when the Ohio river is low; and no doubt can exist, in relation to the establishment of an active commerce, between the whole country near the Ohio Canal and Pittsburg.—These new branches of commercial intercourse and transportation, cannot fail to add greatly to the revenue, as well as to the usefulness of the Ohio Canal. In relation to the second branch of the inquiry, to wit, the most practicable route, and probable expense of accomplishing the object, the board feel no hesitation, in giving it, as their decided opinion, that the Mahoning route so called, is the only one of the routes, to which public attention has been directed, on which a canal can be made, by the expenditure of any sum, which the object in view can possibly justify, where an adequate supply of water can at all seasons of the year, be commanded. There is no doubt of the entire practicability of this route; and the supply of water, both for the summit and lower levels is abundant.

"The board entertain no doubt, that the influence of the proposed canal, when completed, will add greatly to the business on the Ohio Canal, and consequently to the revenue arising from tolls collected thereon, and at the same time, that the tolls collected on the proposed canal itself, will be equal to the interest on its cost, as soon as commercial business shall have adapted itself to the new facilities which this work will undoubtedly offer."

"These views and opinions of the Canal Commissioners of Pennsylvania and Ohio, thus officially expressed, at the call of the Legislature, your committee think are entitled to great weight, and an attentive consideration, formed, as they must have been, on long practical experience and observation, upon a subject in which they can have no personal feeling or interest. Your committee would further suggest, that the charter granted to this company is the only one, the provisions of which necessarily secure to the citizens of Ohio a continuous canal communication from the Ohio Canal to Pittsburg, and the main line of the Pennsylvania Canal—that it will shorten the distance from the point of its intersection with the Ohio Canal to Philadelphia, from what it now is to New York, by the Lake and New York Canal, about two hundred miles—save the expense of a double transshipment—avoid the danger and delay of the Lake navigation—lessen the time consumed in the transmission of goods and produce, from one extreme point to the other, and render it certain—all objects of great importance in mercantile operations. Another suggestion may be worthy of consideration. It has been represented, that the increasing business on the Ohio Canal would soon require an additional supply of water upon the Portage Summit; to obtain which, would require expenditure to a considerable amount, by the State.—If the proposed canal should be constructed, the additional quantity of water, which must necessarily be introduced upon that summit, by this junction, will obviate that difficulty, and dispel all apprehensions arising from such source.

Should this additional supply of water, thus thrown upon the Portage Summit of the Ohio Canal, never be required for canal purposes, still it would always be available to the State, and of immense value for hydraulic purposes. The aggregate quantity of water introduced upon the Ravenna Summit of the Mahoning Canal, during the driest season of the year, ac-

cording to Col. Dodge's calculations, exceeds four thousand three hundred and forty cubic feet per minute;—one half of which would be discharged upon the Portage Summit of the Ohio Canal. This amount would be at the control of the State, and could be turned either north to Cleveland, or south to Roscoe, over a fall of not less than three hundred feet, forming a power sufficient to carry eight pair of  $4\frac{1}{2}$  feet stones, at every 15 feet fall. The estimated value of this water power, for each fifteen feet fall, could not be less than six hundred dollars per year; which would defray the interest on the sum of 200,000 dollars, and induce valuable improvements, whereby the taxable property of the State would be greatly augmented, and the business on the canal much increased.

The experience of the past season has afforded striking evidence of the absolute necessity of opening, to the citizens of Ohio, this new channel of commerce to the seaboard, to save them from the impositions which have been, and will continue to be practiced upon them, by combinations among the carriers, throughout the present line of communication. By an arrangement between the Canal Commissioners of New York and Ohio, a reduction of toll to a considerable extent, was made at the last season, for the express purpose of lessening the cost of transportation, on produce and merchandize, from one State to the other. So far from effecting this object, however, the proprietors of the various lines of boats, residing in New York, immediately increased the prices of freight, to an amount equal to the reduction of tolls, whereby the citizens of Ohio were compelled to pay to the carriers of New York, this increased amount for freight, instead of paying it for toll, for the benefit of the State. So long as there is but one channel of communication from the western country to the seaboard, and its commerce is necessarily restricted to one market, it will continue to be subject to imposition and monopoly, both on its transportation and sale.

By opening another channel, to a different market, we shall bring rival cities into competition for our trade, and two enterprising States to compete for the revenue which must accrue on its transportation. The amount of revenue to be secured by its transmission, a distance of nearly four hundred miles, on their respective canals, already completed, would induce them to reduce their tolls to a considerable extent; and the importance and value of the trade, to their commercial cities, independent of the revenue, might by competition, sink them to a mere nominal amount.

Your committee fully believe, that the amount thus saved to the citizens of this State, by the reduction of tolls and freight on their own property, while seeking an eastern market, would more than defray the annual interest on the capital required for the construction of this canal. The amount of tolls collected the past year, on the New York canals, is about \$1,500,000.—We may safely calculate, that at least one-fifth of this sum was paid on property belonging to the citizens of Ohio!

To insure a continuance of this important commercial intercourse with the west, a reduction of tolls, to one half of their present amount, would be sound policy on the part of New York. This would produce corresponding measures on the part of Pennsylvania. Instead of witnessing the monopoly, which is now fully engrossed by New York, and which has already enabled her to fix such rate of tolls, as to create a fund sufficient to extinguish one half of her canal debt, before it is redeemable, we should soon find her vigorously contending with the State of Pennsylvania, for the invaluable trade of the western country, against the powerful obstacles which nature has interposed by distance, by double transshipments, the uncertainty and danger of the Lake navigation, and by her high northern latitude, which locks up her ports, and closes her navigation, nearly one half of the year.

Being fully convinced of the importance of this work to the State of Ohio, your committee next directed their inquiries to ascertain the most judicious method of accomplishing it.

In coming to a satisfactory conclusion upon this point, the opinions which have been given upon this subject, by the agents of the State, who have had charge of the public works, from their commencement to the present period, as well as such persons, whose experience in works of a similar character, entitled them to much weight, have been carefully examined and duly considered.

His Excellency the Governor of Ohio, has repeatedly urged its importance, as a State work, in his annual messages to the Legislature. In a report to the General Assembly, in 1828, signed by the whole board of the Ohio Canal Commissioners, after the survey and estimates had been made and examined by them, the following opinion is given:

"The profit of this work to the proprietors, must be commensurate to its commercial importance, and it is believed to offer one of the best opportunities for a profitable investment of capital, which can be found in the United States."

In their special report, at the last session of the Legislature, they repeat their convictions of its public utility, and of its becoming a source of revenue to the state, and further say,

"The board have ever entertained and expressed the opinion, that all great public works, in the execution and management of which a large proportion of our citizens are interested, should be under the control of the State, and not of individuals or incorporated companies. The reason is obvious. The Legislature, or other authorized agents of the State, may always be expected to consult the public welfare, in the most extended sense of the term. A company can only be expected to consult its own pecuniary interests, which will frequently clash with the most important commercial and agricultural interests of the community, and thus render the improvement much less useful than it would be, if under the control of the State."

The Canal Commissioners of Pennsylvania have also, in their reports to the Legislature of that State, strongly recommended the extension of their canal, from Pittsburgh down the Ohio river to the Beaver Canal, and the continuation of the Beaver Canal from New Castle to the Ohio State line, as soon as the State of Ohio should take the necessary measures to secure its connection with the Ohio Canal. They state, in a special report, made at the last session of their Legislature, that a "survey and estimate had been made by Dr. Whippo, for a canal from Pittsburgh, by the Ohio river, Big Beaver and Shenango, to Lake Erie, at the harbor of Presque Isle; in which he makes the distance, from the termination of the western division of the Pennsylvania Canal, in Alleghenytown, (Pittsburg), to the mouth of the Big Beaver, twenty-five miles and two hundred and eight perches; and he estimates the cost of construction at \$263,821."

And further say, that

"The extension of the western division of the Canal to the Big Beaver, will become necessary;" and that "the great interests involved in the improvements already made, and in the contemplated extension of the Pennsylvania Canal, to Lake Erie, and the cross cut Canal, to unite those of Ohio and Pennsylvania, will, within a short period, require this link in the north western chain of communication to be completed."—They also express the opinion, that these improvements should "be made at the expense, and for the benefit of the commonwealth, and thus avoid collisions, that may arise from a corporation acting within the limits of the State but under an authority beyond the control of the Legislature of Pennsylvania."

So important did the board of Canal Commissioners, of Pennsylvania, consider this union of these two ex-

tensive lines of canal, in Pennsylvania and Ohio, that they state in their report, that

"In September last, while the board were examining the public works, in the western part of the State, two of the members went up the valley of the Mahoning, and along or near to the proposed route for the cross cut canal, to Akron, on the Portage Summit of Ohio Canal. And it is, in their opinion, the most favorable ground, along the whole route, for constructing a canal, that they have ever seen; with an ample supply of water, that can conveniently be brought to the summit level."

The recent message of the Governor of Pennsylvania, also indicates the deep interest which is felt by the citizens of that State, in the proposed improvement, and their readiness to co operate with the State of Ohio, in effecting it. The following remarks are quoted from that document:

"It is but just, that in connection with the subjects adverted to, I should mention the contemplated connection of the Ohio Canal with the Pennsylvania improvements, at some point to be designated by the Legislature of that State. No decisive steps have, however, as yet, been taken by the State of Ohio, for carrying the contemplated measure into effect. Should a movement be made by her Legislature, for authorizing the proposed connection, it seems to me, that the subject holds out advantages too important to be neglected, and which should induce immediate corresponding measures, on the part of the General Assembly of this State."

Your committee are, also, in possession of information, which may be relied on, that the committee on Canals, in the Legislature of Pennsylvania, in the early part of the present session, reported a bill, directing their Canal Commissioners to construct a lock and canal navigation, from the Pennsylvania Canal to the Ohio State line; provided, the State of Ohio, or a company should agree to complete the balance of the line, to the Ohio Canal, with an assurance that such a bill would be passed by that body.

In justice to the interest of the State, your committee deem it their duty also to state, that assurances have been given, by men of capital, that if the charter granted to this company, should be amended in some of its provisions, and the work duly patronised by the State, and placed upon a footing of equality with works of a similar character, that the stock should be immediately taken up, whenever books should be opened for that purpose; and the work put under contract the ensuing season.

With a full knowledge of these facts, it became a question of serious consideration, whether the permanent interests of the State would best be promoted by extending her canal, the further distance of nearly seventy six miles, to unite with the Pennsylvania Canal on the line of the States, and retaining its control, and the revenue to be derived from it; or by surrendering these important advantages to an incorporated company, and aiding them in its construction.

Most of the advantages which have been mentioned as resulting from this improvement, would unquestionably be secured to the citizens of Ohio, should either course be adopted.

By looking prospectively, however, to the period when these works shall have been completed, and this additional thoroughfare shall have been opened through another State, it may easily be perceived, that such a state of things might be produced, by the counteracting policy of two rival States, to secure to themselves; the immense trade of the west, as to render the absolute control of this connecting link, in the chain of improvements, an object of the highest importance to the State. Nor can your committee suppress the conviction, arising in their own minds, that the central section of a canal, more than seven hundred miles in length, will become a source of immense revenue to the State, and create a fund sufficient to reimburse at no distant

period, the principal and interest of its cost. When we take into view, the extensive improvements which are rapidly progressing, and in contemplation, in the western part of this State and Indiana, and consider the immense amount of the productions of the vast region of country, which must accumulate during the winter season, to seek an early eastern market, through those avenues in the spring, it must be the height of folly to suppose, that it would await the opening of the harbor at Buffalo, when it could take this shorter, safer, and more expeditious route to the sea board, at least five weeks earlier. Nor can they discover any good reason, why it should not be preferred at all seasons of the year.

Fully concurring in the opinions expressed by the Board of Canal Commissioners, that the State should have the control of all extensive works of this character; and, firmly believing in the correctness of the views herein set forth, your committee herewith report a bill, embracing the two routes to which public attention has been directed, for this important connection authorizing the construction of a canal, on the most eligible route, at the expense and for the benefit of the State.

From the Butler Repository.

### CANAL CONVENTION.

Delegates from Allegheny Armstrong, Beaver, Butler, Crawford, Erie, Indiana, Mercer and Venango counties met at the court house in Butler, on Wednesday, the 31st of December, 1834, in pursuance of a previous appointment.

The following named Delegates were in attendance, and took their seats in the convention:

#### Allegheny.

A. W. Foster,  
John P. Bakewell,  
Wm. B. Foster,  
D. C. Stockton,  
R. Hilands,  
C. Plumb,  
Isaiah King,  
C. Darragh,  
John Birmingham,

#### Erie.

Daniel Dobbins,  
William Kelley,  
Robert Cochran,  
Charles M. Reed,  
Geo Gallowher,  
M Hutchinson,  
Smith Jackson,  
Ovid Pinney,  
Wilson King,  
Henry Colt,

#### Armstrong.

Robert Orr,  
Wm. F. Johnston,  
Philip Mechling,  
Alex. Reynolds,  
J. E. Brown,  
Robert Criswell,  
Geo. W. Smith,  
D. O. Walker,  
Jos. Buffington,  
J. Noble Nesbit,

#### Crawford.

Gaylard Church,  
John M'Farland,  
John M'Arthur,  
James White,  
Wm Power, jr.  
David Dick.

#### Indiana.

R. H. B. M'Cabe,  
James Taylor,  
John Gallaher,  
S. S. Jamison,  
William Houston,  
Henry Altman,  
James M. Kelly,  
James Gordon,

#### Mercer.

Joseph Kerr,  
Reven Pearson,  
John Findley,  
Joel B. Curtis,  
Walter Oliver,  
John Mitchelltree,  
William Fruit,

#### Venango.

J. D. Wood,  
Daniel Brown,  
L. S. Reno,

#### Butler.

John Gilmore,  
John Bredin,  
Francis M'Bride,

#### Butler, (Continued.)

John M'Clelland,  
Jacob Brinker,  
R. Cunningham,  
John Negley,  
Wm. Beatty,  
M. S. Lowrie,  
Peter Duffy,

#### Venango, (Continued)

J. W. Hunter,  
T. S. M'Dowell,  
Alex. M'Dowell,  
J. H. Shannon,  
Aaron M'Kissick,  
Andrew Irvin,  
Wm. Stewart.

On motion the convention was organized by appointing the Hon. ROBERT ORR, of Armstrong county, President, Capt. DANIEL DOBBINS, of Erie county, Wm. B. FOSTER, Esq. of Allegheny county. JOHN GILMORE, Esq. of Butler county, and JOHN CLARKE, Esq. of Beaver county, Vice Presidents. Gaylard Church, Esq. of Crawford, Reven Pearson, Esq. of Mercer, Dr. John D Wood, of Venango, and Richard B. M'Cabe, Esq. of Indiana county, Secretaries.

The object of the convention being stated by the President, A. W. Foster, Esq. addressed the convention, on the importance of the object for which the convention convened, in a very clear and appropriate manner.

On motion of Judge Bredin,—a committee of two from each of the delegations, of the several counties, were appointed by the respective delegations, to draft a preamble and resolutions expressive of the sentiments and views of this convention, and also a memorial to the Legislature, to be presented to the convention for their consideration.

A. W. Foster and Robert Highlands, Esqrs. of Allegheny, J. E. Brown and Joseph Buffington, Esqrs. of Armstrong, the Hon. John Bredin and John Negley, Esqrs. of Butler, J. R. Shannon and James Patterson, Esqrs. of Beaver, David Dick, Esq. and Dr. James White, of Crawford, William Kelly and Charles M. Reed, Esqrs. of Erie, J. Gallagher, and R. B. M'Cabe, Esq. of Indiana, Dr. John Mitchelltree, and Walter Oliver, Esq. of Mercer, and Daniel Brown and L. T. Reno, Esqrs. of Venango, were appointed by the respective delegations the committee.

The convention then adjourned, to meet at eight o'clock this evening. The convention met according to adjournment. Mr. Foster, the chairman of the committee appointed to prepare resolutions, and a memorial to the Legislature, informed the convention that the committee would not be prepared to make their report before ten o'clock to-morrow morning. The convention then adjourned to meet to-morrow at ten o'clock, A. M.

THURSDAY, Jan. 1, 1835.

Mr. Foster chairman of the committee appointed yesterday, reported the following preamble and resolutions, and memorial, which on motion of Mr. Bredin, were taken up, read separately, and adopted unanimously, (excepting the seventh resolution—which Mr. King, of Allegheny county, moved to amend by striking out the words following: "rather than enriching the citizens of a neighboring State who pay no part of the expenditures made in the construction of our canals and rail roads." This motion produced some debate in which Messrs King (of Allegheny,) Foster, Bredin, Beatty and King, of Erie, took part, the convention refused to amend, but 18 delegates rising in favor of it,—The resolution was then adopted with but four or five dissenting voices. Mr. Darragh, of Pittsburgh, on the consideration of the resolutions, addressed the convention on the importance of the object of the convention.

Whereas, The Canal Convention which assembled at Harrisburg on the 5th of August, 1823, composed of delegates representing forty-seven counties of this Commonwealth, coming immediately from the people, and through their primary meetings, possessed a full knowledge of their views and wishes on the important subject for which the Convention met, adopted among



others, the following resolution: "Resolved, that the improvement of the Commonwealth will be best promoted, and the foundation of her prosperity, and happiness most securely established, by opening an entire and complete communication from the Susquehanna to the Allegheny and Ohio, and from the Allegheny to Lake Erie, by the nearest and best practicable route, and that such a work is indispensably necessary to maintain the character of the State, and to preserve her strength and resources." And whereas, the preamble of the act of Assembly, of the 25th of February, 1826, passed in pursuance of the expressed will and wishes of the citizens of the state, authorizing the commencement of the Pennsylvania Canal, states the practicability and the necessity of the construction of a canal *within our own limits*, for the purpose of connecting the eastern and western waters; and its being believed that its speedy completion would advance the prosperity and elevate the character of Pennsylvania, facilitate intercourse, and promote social interests, and thus strengthen the bonds of the Union. And whereas, a continuous communication between the city of Philadelphia and the city of Pittsburg, by canals and rail roads, is now completed, and the tolls received on which have increased in such a ratio as to remove every doubt that the money expended in their construction will be a profitable investment, producing, eventually, sufficient not only to pay the interest on the debt incurred by the State, but to discharge it, and afford a permanent revenue. And whereas, a portion of the canal from the Allegheny to Erie is completed, in the construction of which a considerable amount of money has been expended, to carry into effect the objects of the people and the Legislature, as expressed in the resolution and preamble referred to, and in other acts of the Legislature. And whereas, the completion of the canal to the harbor of Erie, within our own bounds, is of the greatest importance to the citizens of Western Pennsylvania, and of the state generally, called for as well to redeem the plighted faith of the state, as to secure a participation in the growing and immense trade that is on our ISLAND SEAS, the lakes of the north-west,—Therefore,

Resolved, That the object of this Convention is to press on the Legislature the completion of the Pennsylvania Canal to the harbor of Erie, within the bounds of the State, as contemplated by the people and the Legislature, when the canal system was commenced.

Resolved That the people of Western Pennsylvania, who are, and who have at all times been, from the commencement of the canal system, its steady friends and uniform advocates, have a right to expect that such measures will be adopted by the Legislature at the present session, as will secure the prosecution and completion of this section of the canal.

Resolved, That the best interests of this state require that this great and important improvement should be completed with the least possible delay, and that an appropriation should be made by the Legislature for that purpose.

Resolved, That in the opinion of this Convention, the completion of this part of the main line of the Pennsylvania canal, as originally contemplated, will not only increase the population, wealth and prosperity of this section of the state, but will unquestionably render the balance of the main line much more productive to the State, by connecting it with Lake Erie, the natural reservoir of western trade, giving to Pennsylvania a participation in the trade and commerce of the Lakes, which is already immense, and increasing in such a degree, that in the course of a very few years it will be equal to, if not greater than the trade of the valley of the Mississippi.

Resolved, That in the opinion of this Convention, that if the canal were completed to the harbor of Erie, which is considered the only safe and secure harbor on the Lake, from Sandusky to Buffalo, a large portion

of the commerce and trade of the Lakes would be secured to the Pennsylvania Canal; and in addition to the advantages to be derived from the safety and security of this harbor, the Pennsylvania Canal would be navigable several weeks earlier in the spring and later in the fall than the New York canal, the harbor at Buffalo being closed up with ice for four to six weeks in the spring, after the harbor at Erie is clear, and the navigation of the lakes west of that port open and unobstructed.

Resolved, That it is the interest as well as the duty of the state to secure the trade of the lakes by the canal running entirely within her own boundary to the lake, thus increasing the wealth of her own citizens, and adding to her own resources, (rather than enriching the citizens of a neighboring state, who pay no part of the expenditures made in the construction of our canals and rail roads,) and especially is this the interest and duty of the state, when the canal to the Harbor at Presque Isle is the most direct shortest and best route to the lakes.

Resolved, That in the opinion of this Convention, the faith of the state is solemnly pledged to carry into effect the object embraced in the foregoing resolutions.

Resolved, That the following memorial, setting forth the sentiments of this Convention, and the importance of the completion of the canal through our own limits, to the harbor of Erie, be adopted and signed by the officers and members of this convention.

#### MEMORIAL.

*To the Honorable the Senate and House of Representatives of the Commonwealth of Pennsylvania, in General Assembly met.*

The undersigned delegates representing the people of the North Western, and some of the western counties of the State, having convened in Convention, in Butler, for the purpose of devising some means in aid of the speedy prosecution and completion of the Pennsylvania Canal to Lake Erie, at the Harbor of Erie, have thought proper among other things, to address a memorial to your honorable bodies in behalf of the people we represent.

Time, and the limits we think proper to prescribe to a paper of this character, prevent us from entering at large into all the arguments which present themselves in favor of this measure. We shall content ourselves by stating some of the prominent and leading considerations, trusting the issue to the liberality and justice of the Legislature.

In the first place, then, we claim that for the completion of this work, we have the plighted faith of the State, made, not only in the ordinary mode of Legislative enactment, but by the people themselves in solemn Convention. We claim that the extension of the canal to Lake Erie, running entirely, through our own territory, and terminating at the harbor of Erie, was a part of the great original project of Pennsylvania improvements, first promulgated by the act of the Legislature of the 25th of April, 1825, and subsequently ratified by the great convention of the people held in August of the same year. In support and proof of this position, we have but to quote from the law and the proceedings of the Convention. The act of 1825, which is looked upon as the commencement of an improvement system, was in its nature, a proposition to the consideration of the people. It merely condensed, systematized, and selected from the various projects which the spirit of improvement had suggested, such as in the opinion of the Legislature, were worthy of State patronage. It authorized surveys and reports, but left the ultimate decision of the question to future legislation. This proposition, or system proposed in the act, contemplated an entire communication connecting the tide waters of the Delaware with Lake Erie. The preamble and

leading enacting clause are as follows:—"Whereas the establishment of a communication between the Eastern and Western waters of this State and the Lakes, by means of navigable streams and canals, would advance our agriculture, commerce and manufactures; would unite in a common interest, the great natural divisions, of the state, and would in the end be an important source of revenue to the commonwealth: And whereas, the best interests of the State require that this great and important improvement should be the property of the commonwealth, and that the commonwealth ought to embark in it with that zeal and energy that is best calculated to carry it into effect—Therefore," Section 1st. "Be it enacted—That the Governor be, and is hereby required to appoint five canal commissioners, a majority of whom shall be a quorum, to consider and adopt such measures as they shall think requisite and proper, preparatory to the establishment of a navigable communication between the Eastern and Western waters of the State, and Lake Erie."

On the publication of this law, the people met in various primary assemblies, and ultimately in convention at Harrisburg, on the 5th of August, to consider and decide upon the propositions therein contained, and to agree finally upon the nature and extent of the system of improvement which ought to be undertaken and prosecuted by the State, at the public expense. This convention, consisting of 113 delegates, representing forty-seven counties, coming fresh from the people, instructed in the several primary assemblies, in which they were appointed, after due deliberation fully ratified the proposition of the legislature, and gave the sanction of the people to the great undertaking. This convention among others, adopted the following resolution.

"Resolved, That the improvement of the commonwealth will be best promoted, and the foundation of her prosperity and happiness most securely established, by opening an entire and complete communication from the Susquehanna to the Allegheny and Ohio, and from the Allegheny to Lake Erie by the nearest and best practicable route, and that such a work is indispensably necessary to maintain the character and standing of the State and to preserve her strength and resources."

In the Convention the people whom we represent were represented, and gave the proceedings their sanction and concurrence, and have ever since on all occasions faithfully and steadfastly supported the system.— They viewed it in the nature of a common undertaking and mutual contract, to which the faith of the State was pledged. They have through their representatives voted for appropriations towards the work in other parts of the State, and now ask that the same good faith may be observed towards them: they ask that the pledged faith of the state may be redeemed. This claim of sheer justice we now assert and in the name and behalf of more than 250,000 citizens of the State assert it in all its length, breadth, and strength—a claim on which, every other consideration set aside, we could rely, and in security, if justice and honor are not fled from our councils.

But on this claim, strong as it is, we are not compelled to rely. There are other strong and urgent reasons for the extension of the canal to the Lake. It would settle and enrich a large tract of good and comparatively new country, consequently add to the wealth and common resources of the state—it would build up villages, towns, and even cities, and in a short time double the population, and quadruple the wealth of the whole North West—it would tend as expressed in the resolution of the canal convention before recited, "to maintain the character and standing of the State and preserve her strength and resources;" "it would unite," as expressed in the preamble of the act of 1825, "the natural divisions of the State," facilitate and promote mutual intercourse and trade, and otherwise add

to the common benefit of all. These are considerations of high importance and such as are now engaging the enterprise and energies of our neighboring and rival States. We would press them upon your consideration.

But independent of this view of the question, if the country between Pittsburg and Erie, instead of being susceptible of a high state of cultivation, and becoming a rich agricultural country, supporting a dense population, was a barren waste, still we are of opinion that the best interests of the state would require the extension of the canal to its original termination. It would open up an avenue by which a portion of the great trade of the lakes could be commanded, to the great benefit and profit of Philadelphia, our great commercial metropolis, as well as other portions of the state, and to the vast increase of tolls and canal revenue. If in 1825 these considerations were taken into account—if then they were considered of any importance, and formed any inducement to the original undertaking, they are now of an hundred fold more weight. What was then mere speculation is now reality. In 1825 the trade of the lakes was trifling, now it is immense, and increasing beyond the most sanguine anticipations. Then there was but one Steamboat on Lake Erie, now there are thirty-four, fifteen of which, amounting to 4,000 tons, were built in 1834; then there were but a few small and ill found Schooners, now there are about one hundred and fifty, some of which are of more than 200 tons burthen, and all of them in size, appearance, and fitness for business equal to the same class of vessels on the Atlantic coast. This vast increase of vessels on Lake Erie, is still far short of the increase of business. By the opening of the Welland canal, running through Canada, a considerable portion of the Lake Ontario vessels, are engaged in the Lake Erie trade. A large portion of the salt for the supply of the country bordering on Lake Erie, and the West, is brought from Oswego through the Welland Canal. The vessels take in return cargoes of agricultural products, a portion of which goes to the Montreal market, and the balance is landed at Oswego, from thence to be transported through the Oswego and Erie canals to New York. It is believed, from information derived from official sources, that there is at least 2,500 tons of Lake Ontario shipping constantly employed in the Lake Erie trade.

If such has been the increase of Lake trade in the last few years when the great West is in its infancy, what may we expect when it is covered with a dense population, which its uncommon fertility, and the facilities of emigration leave little doubt, will be the case before many years. Last year it was ascertained there were about 60,000 emigrants left the port of Buffalo for the far west. It is believed, although no exact account was kept, that the increase from the same port this year, was at least thirty-three per cent, which will make about 80,000. The emigration shipping at all the other ports has also been large. No estimate of the number of emigrants by land can be made, it has however been very great—the road leading from Buffalo west along the lake shore has been literally filled with them, as high as 250 waggons with families have been counted in a single day. The Territory of Michigan has more than quadrupled its population in four years, and the increase in the North Western counties of Ohio, and the northern parts of Indiana and Illinois, has probably been in and about the same ratio. This immense and fertile country will put afloat upon the lakes its surplus produce, there to seek the Atlantic through the shortest, cheapest, and most certain channels. Of this there can be no doubt. The New Orleans market is precarious, and which, from sad experience, the western agriculturist wishes to avoid—there can be also but little doubt that a large portion of the trade of the western section of Ohio, and of the whole country watered by the Wabash and Illinois rivers, will be

turned to the lakes, when the Dayton and Sandusky rail road, the Wabash and Erie, and the Illinois and Chicago canals, which are now being made, are finished. All these communications, lead through the most fertile countries, and will doubtless become the most important feeders of the lake trade.

This trade so important, and in return for which the West will require, in exchange, the merchandise and manufacture of the Atlantic States, can in our opinion be in a great measure controlled by Pennsylvania, to the incalculable benefit of Philadelphia and Pittsburg, and other parts of the State, as well as to the great increase of tolls and revenue of the Pennsylvania Canal.

If it be asked, how this can be done? it will be only necessary, in answer, to refer to her local situation, and a few facts, which although generally known, lose none of their force by repetition. New York, and Pennsylvania, are the only two States which can have an entire communication between the Atlantic and the lakes within their own territories. This advantage is one, which early attracting the attention of Pennsylvania, was secured by purchase in 1791. By the original charter the northern boundary of Pennsylvania did not touch the lake. There was a narrow strip of land on the north side of the line and west of the New York line, which then was vacant. This strip of land which is called the Triangle, was purchased by Pennsylvania of the United States Government, for about 150,000.— This purchase was made at about eighty-eight cents per acre. The object of the purchase was not the land, for the great portion of the west was then a wilderness, but to get a foothold upon the lake. The wisdom of this purchase is now apparent, without it we would have been cut off from the northern seas; or if we approached them, it must have been through the territory of another state, and of course subject to such restrictions as might be put upon us. New York has already seized hold of the advantage of her situation, and opened her communication with the lake, and has been munificently rewarded for her enterprise. Her great Canal has been the principal corner of that unexampled prosperity, that has within a few years, given her the proud distinction of the empire State. But it has been found that her northern latitude, and the consequent early freezing up of her canal in the fall, and the long continuance of ice in the Buffalo Bay in the spring, are serious difficulties, and such as all her enterprise cannot overcome. These difficulties are avoided in Pennsylvania, by her more southern latitude, and by the fact that the ice is out at the harbor of Erie, for from four to six weeks earlier in the spring than at Buffalo. It is believed from calculations for a series of years, that an average of at least six weeks of uninterrupted communication between Philadelphia and the lakes, by the Pennsylvania Canal, might be depended on, when the communication from New York to the Lakes, would be closed with ice. This is an advantage of the highest importance, and one which must give Pennsylvania a decided advantage over her rival, an advantage that is greatly enhanced from the fact, that these six weeks are within the time of the heaviest trade, when the agriculturist wishes to market his produce, and the merchant to get on his goods.

We would further represent that in our opinion the State was not only fortunate in having secured a frontier on the Lake, but in having secured it at the very point, where, if she had the whole coast to select from, she would make choice; it enabling her to reach the Lake by the shortest communication, and to terminate the canal, at not only the best harbor on the lake, but one that is susceptible of being made, and we doubt not, under the fostering care of the general government, will be made one of the best harbors in the world. It is a complete place of refuge in case of storms, and to which all vessels caught out, make for shelter if in their power. It is spacious, of good depth of water, easy of

access, and capable of having made at a moderate expense two good and safe entrances in opposite directions so that a vessel can sail into one channel and out of the other with the same wind.

Possessing the shortest route to the Lake, is not only an advantage in cheapness of construction, but will prove a still greater advantage in cheapness of transportation. By canals and rail roads the expense of transportation is in a great measure proportioned to the distance. Not so on the Lake, property once afloat is transported to any port on the lake at about the same price, the great expense and delay is in lading and unlading. Merchandise could be transported from Erie to the head of the lakes, or the upper lakes, at the same charges it would be from Cleveland to Grand river, and produce from Sandusky, Maumee, Detroit, or any port west could be shipped to Erie, at the same price it would be to Cleveland, or any other intermediate port between Cleveland and Erie. The Harbor at Erie not only being the nearest Port at which the Lake can be reached, and consequently to be preferred on the ground of cheapness of construction, and transportation, but is sufficiently far west to avoid all the difficulties of ice which obstructs the navigation at Buffalo. It is open at nearly the same time as the Ports above, and always as soon, and even before the Pennsylvania, or Ohio Canals would be clear of ice on the Lake summit. In addition to the immense transit trade, which would pass through this section of the canal, there are articles of immense value and in almost inexhaustible quantity, which are found on the line, and which would find a ready and extensive market.— We allude to the articles of coal, white oak, and pine timber, of the first article there is none found on the lakes, or on the line of the New York Canal, or in Canada, and the other articles are scarce and in demand. It is believed that good coal approaches nearer the Lake on this line, than at any other point; it is found of a good quality, and in abundance within less than sixty miles of the Lake. This article alone if there was no other transportation, would in a few years afford sufficient employ to the Canal to make it profitable. It is believed even now, if the canal were finished, it could be afforded at so low a price as to supercede the use of wood as a common article of fuel at Erie, and probably at the city of Buffalo, and many other towns. From the foregoing facts and reasons adduced, we feel well assured that a continuation of the Pennsylvania canal to the Lake, at the harbor of Erie, would give to our commercial, mercantile and manufacturing cities a most decided advantage over any and all others, in the commerce and trade of the regions of the lakes.

We therefore respectfully ask, for the several reasons assigned, that a liberal appropriation be made this present session, for the extension and speedy completion of the canal to the harbor of Erie. That part of the main line between Philadelphia and Pittsburg is now completed, or nearly so, and sound policy dictates that the balance of this great work be now completed with the least possible delay. It is not only due to the people whom we represent, but to the State; she has by common consent, and at the common expense, commenced a grand system of improvement, which this far has realized, the expectations of the most sanguine.— Let it be completed as designed, and we doubt not it will redound to her honor and glory, and not only have a tendency to maintain, but to raise her standing in the scale of the Union, which should be the pride of every true hearted Pennsylvanian.

In conclusion we again, in behalf of the people we represent, respectfully ask that the prayer of this memorial may be granted, and that our just claims be no longer delayed.

On motion of Mr. Lowrie,

Resolved, That a committee of correspondence be

appointed in each county, to consist of three delegates for each county represented in this Convention.

Resolved, That the committee of correspondence to be appointed in Butler county, superintend the publication of the proceedings of the Convention.

Resolved, That the same committee prepare, and circulate for signatures by the people, a petition to the Legislature, for the extension and speedy completion of the canal to Erie.

The following delegates were appointed committees of correspondence in their respective counties.

*Allegheny*—Messrs. A. W. Foster, Bakewell, and Darragh.

*Armstrong*—Messrs. Brown, Buffington, and Johnston.

*Butler*—Messrs. Bredin, Cunningham, and Lowrie.

*Beaver*—Messrs. Townsend, Shannon, and Gould.

*Crawford*—Messrs. Church, McArthur, and Dick.

*Erie*—Messrs. Kelley, Cochran, and Johnston.

*Indiana*—Messrs. Taylor, Jamison, and Gordon.

*Mercer*—Messrs. Pearson, Findley, and Curtis.

*Venango*—Messrs. Reno, Brown, and S. T. M'Dowell.

On motion of Mr. Bredin,

Resolved, That the proceedings of this Convention be signed by the officers of the Convention, and published in all the papers in the State that are friendly to the internal improvement system.

Mr. King, of Allegheny county, offered the following resolutions to the Convention, put the question on them, and they were unanimously adopted.

Resolved, That the thanks of this Convention are due, and are hereby presented to the Commissioners of Butler county, for the use of the Court House, during their session.

Resolved, That the thanks of this Convention are due, and are hereby presented to the President, and other officers of the Convention, for the able, dignified, and satisfactory manner in which its proceeding have been conducted.

ROBERT ORR, President.

WM. B. FOSTER,  
JNO. GILMORE,  
DANIEL DOBBINS,  
JOHN CLARKE,

Vice Presidents.

*Goylord Church,*  
*R. B. M'Cabe,*  
*J. D. Wood,*  
*Beaven Pearson,*  
Secretaries.

*Allegheny.*

A. W. Foster  
John P. Bakewell  
D. C. Stockton  
R. Hilands  
C. Plumb  
Isaiah King  
C. Darragh  
John Birmingham  
*Armstrong.*  
Wm F. Johnston  
Philip Meclling  
Alex. Reynolds  
J. E. Brown  
Robert Cristwell  
Geo. W. Smith  
D. O. Walker  
Jos. Buffington  
J. Noble Nesbit

*Beaver.*

A. W. Townsend  
Edward Wright  
Edward Hoops

*Erie.*

William Kelley  
Robert Cochran  
Charles M. Reed  
Geo. Gallowhar  
M. Hutchinson  
Smith Jack-on  
Ovid Pinney  
Wilson King  
Henry Colt  
*Crawford*  
John M'Farland  
John M'Arthur  
James White  
Wm. Power, jr.  
David Dick  
*Indiana.*  
James Taylor  
John Gallaher  
S. S. Jamson  
William Houston  
Henry Altman  
James M. Kelley  
James Gordon

*Beaver, (continued.)*

John R. Shannon  
James Patterson  
M. T. C. Gould  
Wm. Allison  
Henry C. Moore  
Wm. Morton

*Butler.*

John Bredin  
Francis M'Bride  
John M'Clelland  
Jacob Brinker  
R. Cunningham  
John Negley  
Wm. Beatty  
M. S. Lowrie  
Peter Duffy.

*Mercer.*

Joseph Kerr  
John Findley  
Joel B. Curtis  
Walter Oliver  
John Mitcheltree  
William Fruit.

*Venango.*

Daniel Brown  
L. S. Reno  
J. W. Hunter  
T. S. M'Dowell  
Alex. M'Duwell  
J. H. Shannon  
Aaron M'Kissick  
Andrew Irvin  
Wm. Stewart.

From the Harrisburg Chronicle.

## PENNSYLVANIA LEGISLATURE.

### SENATE.

Friday, January 9.

The Speaker laid before the Senate a letter from A. Mahon, State Treasurer, accompanied with a report of the business of his office, and soliciting a re-election.

Also, a report of the Canal Commissioners, made in compliance with the resolution of the Senate on the 13th of December last.

J. KENN, Esq. Speaker of the Senate.

SIR:—In compliance with a resolution of the Senate of the 13th December last, requesting the Canal Commissioners to report to the Senate what amount of toll was derived from the transportation of rail road iron and other property belonging to the commonwealth, during the year ending on the 31st of October last, the following statement is respectfully submitted:

The contractors for delivering rail road iron on the Columbia rail way have paid toll for transporting the same on the rail way.	\$7,240 22
The contractors for delivering rail road iron on the Portage rail way have paid toll for transporting the same on the canal and Portage rail way, within the year ending 31st October last,	6,879 34
Toll paid on other property belonging to the Commonwealth,	84 67

Whole amount, \$14,204 23

The foregoing statement exhibits the whole amount of tolls paid within the year ending on the 31st of October last, on rail road iron the property of the Commonwealth, which was transported on the Canal and Rail ways: also, the amount paid upon other property of the Commonwealth, as far as the same can be accurately ascertained.

It may not be improper to add, that the tolls on the Canal are, by the act establishing an Internal Improvement fund; passed on first April, 1826, to be paid to the Commissioners of the said fund, for the purpose of paying the interest and purchasing or re-imbursing the principal of the Canal debt.

This pledge includes all the tolls, those payable on public as well as private property; and the public agents could not, without violating the said act, and impairing the security thereby pledged, do otherwise than to collect on public property, transported upon the Canal, the customary toll payable on the same kinds of property owned by individuals. Besides, there having been no rule or law in existence exempting public property from the payment of tolls, at the time when the appropriations were made for the completion

of the Rail ways, an exemption from such payment would, in effect, amount to an additional appropriation.

It also appears from an estimate lately made, that there has been saved to the state, by the facilities afforded by the Improvements, in the transportation of materials for their construction a sum exceeding \$70,000. This advantage justly entitles the canal and rail ways to a credit for the ordinary tolls on public property transported thereon.—By order of the Board.

J. MITCHELL, Canal Commissioner.

*Canal Commissioners' Room,*  
HARRISBURG, Jan. 8, 1835.

## GIRARD COLLEGE FOR ORPHANS.

*Report of the Building Committee of the Girard College for Orphans,*

To the Select and Common Councils of Philadelphia.

*Together with a Report to the Building Committee, by*

THOMAS U. WALTERS, Architect.

The Building Committee of the "Girard College for Orphans," to the Select and Common Councils of Philadelphia, REPORT—

That in pursuance of the duties of their appointment, it devolves upon them to communicate to Councils their proceedings during the past year.

They take pleasure in saying, that the work under their charge has progressed to their entire satisfaction, and their expectations have been fully realized in its execution.

Nothing has been omitted that would give permanency and durability to the edifice; and all contracts have been made with strict reference to economy, on the one hand, and the capability of the contractors on the other.

The committee would further observe that the rapidity with which the work has progressed during the past year, merits their approbation.—They are of opinion that more than one story of the college should not be constructed in any one year, and each season's work should be so arranged, as to make the arching, the first business of the year; that course has been thus far pursued, and its advantages are obvious; the arches have time to become sufficiently firm to enable them to resist uninjured, the frosts of winter, and when they are left at the close of the season, there is about 18 feet of the walls of the next story above them, which has a tendency to strengthen them.

The committee respectfully recommend, that one of the out buildings be commenced in the ensuing spring; and in order that the arrangement of these buildings, may be such as fully to meet the purposes of the Institution, they recommend, that the Trustees of the Girard College be requested to appoint a committee of eight, who, together with this committee, and the Architect, shall be directed to lay before Councils a plan embracing the whole arrangement of out buildings.

They respectfully submit the report of the Architect, which document contains a detailed account of the proceedings in relation to the college during the past year; also a summary statement of the expenditures since the commencement of the work.

All of which is respectfully submitted?

JOHN GILDER, Chairman.  
JAMES BURK,  
PETER WRIGT,  
JOHN M. BARCLAY,  
JAMES HUTCHINSON,  
DENNIS M'CREDY,  
JOS. LIPPINCOTT,  
J. ROACH.

Philadelphia, Dec. 25, 1834.

## TO THE BUILDING COMMITTEE OF GIRARD COLLEGE.

Gentlemen—Having closed the work for the present season, I have the honor in conformity with your instructions, to lay before you a summary of our proceedings during the past year.

At the date of my last annual report, the walls of the building were so far advanced, as to be prepared for receiving the arches to support the floor of the first story; and your resolution of the 14th of January last directed, that during the season of 1834, the building should be raised to a sufficient height to receive the arches of the second story. This has accordingly been accomplished.

The masonry work is now finished to the height of 18 feet 8 inches above the basement, making the present elevation of the building 29 feet above the ground.

The wall for the support of the columns, (which is 9 feet in thickness, and extends around the whole edifice,) is entirely finished.

The platform around the building is substantially arched, and prepared to receive the marble pavement.

At the close of the last season, all the workmen, except the stone cutters, carpenters, and blacksmiths, were discharged. The stone cutters were occupied during the winter, in carving capitals and bases for the interior columns, and in working ashlar; the carpenters were engaged in framing centres for the large arches; and the blacksmiths in forging bolts, straps, &c. for the centring.

On the 27th of March, the stone masons and bricklayers commenced work for the season.

The four large groin arches, for the support of the floor of the first story, were commenced on the 25th of April, and finished on the 14th of June; they are constructed in the best manner possible;—each arch contains (exclusive of the abutments) 75,000 bricks; the keys are all composed of marble, fitted and arranged with great accuracy;—all the arches of the basement were finished, and the walls of the first story commenced in the month of June.

In compliance with your resolution of the 11th of March, we have constructed the interior walls, above the basement, of bricks, and the piers for the support of the second story arches, in alternate sections of bricks and dressed granite. Much delay was occasioned to the building, in consequence of not being able to obtain these stones as rapidly as they were required; in order, therefore, to prevent future inconvenience from the same cause, we have placed under contract, all the hammered stone that will be required in the construction of the corresponding piers, in the second story.—About one-third of the quantity has already been delivered at the College.

The iron bands for resisting the horizontal thrust of the arches for the second story, are all completed; the iron is of a very superior quality, and well wrought.

The setting of marble was commenced on the 26th of May, and prosecuted with vigor during the remainder of the season. Every attention has been paid to have this part of the work substantially executed; all the ashlar is doweled together, and securely connected with the brickwork, by means of crampirons.

In the month of April last, we contracted with several carvers in marble, for finishing seventeen of the capitals for the exterior Portico; all of these capitals have been commenced, and parts of several of them have already been completed, they are highly creditable to the arts in this country, and will not suffer by a comparison with any imported architectural carving that I have ever yet seen.

The sixteen Ionic columns for the vestibules of the first story, are in progress of execution; twelve capitals, and ten bases are now finished, the remaining part will be completed during the winter.—We are working the

shafts of each of these columns in one piece; they are two feet in diameter, and fourteen feet long.

The marble that has been delivered during the past year, fully equals our expectations, both in quality and quantity.—No difficulty has occurred in obtaining the largest blocks that will be required in the construction of the College: some of these blocks have already been conveyed to the building with great facility. In consequence of their unusual size, considerable preparation was necessary, before the contractors were ready to furnish them; we therefore experienced some delay in the early part of the work, but such an arrangement has been made, as to insure the delivery of the heaviest pieces, as rapidly as they will be required.

The quarries of Messrs. Jacobs & Cornog are now in a better state for obtaining marble, than they have been since the commencement of the work;—these gentlemen have ready for delivery several large column blocks, and a considerable quantity of marble for the capitals, all of which they are now about commencing to convey to the building.

All the contractors for furnishing marble have complied with their respective contracts. Some delay occurred, in obtaining stone for the window jambs, but it was in consequence of their unusual size. The contractors are now occupied in quarrying the corresponding stones for the second story, so that no future difficulty will arise from this cause.

All the lumber for forming the centres, for the arches of the first story, is under contract, and a considerable portion has already been delivered; these centres will be constructed during the winter, so as to commence setting them, as soon as the walls are uncovered in the spring.

We have suspended for the winter, all work which could not be performed in the shops, and securely covered the walls and arches, so as to protect them from injury by frost.

There have been two millions of bricks, sixteen thousand superficial feet of marble, three thousand seven hundred cubic feet of granite, and one thousand one hundred perches of rubble stone, used in the building during the past year.

There are now on the ground, about seven hundred thousand bricks, reserved for commencing work in the spring; we have also about six thousand feet of finished ashlar, window cornice, sills, &c., and seven thousand seven hundred cubic feet of marble in the rough, suitable for capitals, cornices, &c.

The whole quantity of marble delivered during the past year, amounts to 26,082 cubic feet.

The farm house, that was in progress of execution at the time I made my last annual report, has been completed;—there have also been erected a barn, spring-house and kitchen. All the land not occupied in the building of the college, amounting to about 28 acres, has been put under good fences, and rented to a farmer.

The expenditures from December 23, 1833, to December 23, 1834, amount to \$112,048

There are now on the ground materials and workmanship unpaid for to the amount of 14,500

To which sums, add the expenses of 1833, amounting to 69,990

Making the whole expense since the commencement of the work amount to 196,544

From which deduct the sum expended in improving the farm attached to the college building, farm house, barn, &c., amounting to 8,500

Making the sum expended and yet due on account of the college, since the commencement of the work, amount to 183,044

The materials and workmanship now on the

ground, and not yet made use of in the building, are worth about

23,000

Making the cost of the building in its present state, including all incidental expenses, such as work shops, hoisting machines, tools, &c. amount to 165,044

A sum which is understood to be more than \$40,000 less than the income from the college funds during that period.

Permit me most respectfully to invite your attention to the subject of the "out buildings"—Whether it is expedient for the general execution of the purposes of the Will of Mr. Girard, to begin the instruction of the orphans before the completion of the college, is a subject on which I do not presume to offer an opinion; but what I venture respectfully to suggest, is, that the works of the college are now so far advanced that the operations can be extended very easily, and advantageously as they may now be all included under the same system of management, without any additional expense for superintendence.

In this view of the subject, I submit for your consideration the propriety of commencing one of the out buildings in the spring; it could be completed for use and occupied before the large recitation rooms in the college would probably be wanted; and the whole work, both college and out buildings, could thus advance together, not only without disadvantage, but with mutual benefit to each other, both as it regards economy and appearance.

I have the honor to be,

Very respectfully,

Your obedient servant,

THOMAS U. WALTER, Architect,  
Girard College, December 23, 1834.

To JOHN GILDER, ESQUIRE,  
Chairman of Building Committee,  
Girard College for Orphans.

#### MINT OF THE UNITED STATES.

Report of the Director of the Mint, in relation to the operations of that institution during the year 1834.—Read, and laid upon the table.—January 12, 1835.

WASHINGTON, }  
January, 10, 1835. }

Sir:—I herewith transmit to the House of Representatives a report from the Director of the Mint, exhibiting the operations of that institution during the year 1834.

ANDREW JACKSON.

The Hon. the Speaker of the House of Representatives.

MINT OF THE UNITED STATES, }  
Philadelphia, January 1, 1835. }

Sir:—I have now the honor to submit a report of the general transactions of the mint during the last year.

The coinage effected within that period amounts to \$7,388,423; comprising \$3,954,270 in gold coins; \$3,415,002 in silver; \$19,151 in copper; consisting of 11,637,643 pieces of coin, viz:

Half eagles	732,169 pieces, making	\$3,660,845
Quarter eagles	117,570 do	293,425
Half dollars	6,412,004 do	3,206,002
Quarter dollars	286,000 do	71,500
Dimes	635,000 do	63,500
Half dimes	1,480,000 do	74,000
Cents	1,855,100 do	18,551
Half cents	120,000 do	600
	<hr/> 11,637,643	<hr/> \$7,388,423

The deposits of gold within the past year, have amounted, in round numbers, to \$4,389,000; of which about \$1,067,000 consisted of coins of the United States, issued previously to the act of 28th June, establishing a new ratio of gold to silver: about \$898,000 were derived from the gold regions of the United States; \$225,000 from Mexico, South America, and the West Indies; \$2,180,000 from Europe; \$12,000 from Africa; and \$9,000 from sources not ascertained. Of the amount received from Europe, about four fifths were in foreign coins.

The coinage of gold under the new ratio, commenced on the first day of August, the earliest period permitted by the act. In anticipation, however, of a change in the legal valuation of gold, it had been considered proper to suspend the coinage of all deposits received after the 1st June. Previously to this period, the sum of \$383,545 had been coined, so that, of the above amount of the gold coinage for the past year, \$3,570,725 consist of coins of the new standard. This amount, however, is the result of the operations of the mint during only five months of the year, corresponding to an amount, for a full year, of about 8½ millions in gold. Within the same period, the coinage of silver was regularly maintained at the average rate of the whole year, making a general result of both gold and silver corresponding to a yearly coinage of nearly \$12,600,000.

The amount in gold in the vaults of the mint on the 1st August was \$468,500; the amount now remaining in the mint uncoined is \$435,000; no part of which was deposited earlier than the 9th December. The amount of silver remaining in our vaults for coinage, is, in round numbers, \$475,000; no part of which was deposited earlier than the 20th November.

The amount of silver coined within the past year, it is satisfactory to state, has exceeded by about a quarter of a million the silver coinage of any previous year; while the gold coinage has exceeded the aggregate coinage of gold during the nine preceding years, from 1825 to 1833, inclusive.

The influx of silver during the past year having very considerably exceeded the amount contemplated in the estimates for the year, occasioned, during a large portion of that period, an unusual retardation in the delivery of coins; and the amount of deposits has no doubt been restrained, to some extent, by this consideration. The estimate for the current year, it is believed, will cover the power required to meet the whole demand for coinage, in a due proportion of the several denominations of coin.

Annexed is a table exhibiting the amount of gold received from the gold region of the United States, annually, from the year 1824, inclusive. It will be observed, that the progressive increase in the amount received from that quarter is less conspicuous within the last year. This results, it is believed, in a very material degree, from the attention which has, during that period, been directed to arrangements for working the veins from whence have been derived those superficial deposits of gold, which, being most obvious, have heretofore attracted the principal regard. Nothing has occurred to weaken the impression before entertained as to the extent and richness of the gold mines of the United States, but much to confirm the confidence before expressed, not merely in their increasing productiveness, but in their permanency.

I have the honor to be,

With great respect,

Your obedient servant,

SAM. MOORE,  
Director.

The President of the United States.

STATEMENT of the amount of Gold produced annually, from the Gold Region of the United States, from the year 1824 to 1834, inclusive.

Years.	Virginia.	North Carolina.	South Carolina.	Georgia.	Tennessee.	Alabama.	Total.
1824	—	5,000	—	—	—	—	5,000
1825	—	17,000	—	—	—	—	17,000
1826	—	20,000	—	—	—	—	20,000
1827	—	21,000	—	—	—	—	21,000
1828	—	46,000	—	—	—	—	46,000
1829	9,500	134,000	—	3,500	—	—	147,000
1830	24,000	204,000	—	26,000	—	—	254,000
1831	26,000	294,000	—	22,000	—	—	342,000
1832	34,000	458,000	—	43,000	—	—	535,000
1833	104,000	473,000	—	140,000	1,000	—	718,000
1834	62,000	380,000	—	216,000	7,000	—	665,000
1835	252,500	2,054,000	200,500	1,159,000	12,000	1,000	3,679,000

#### THE WESTERN CANAL.

Mr. Chandler presented the annexed report to the Common Council, which was laid on the table.

The joint special committee, to whom was referred the memorial of sundry citizens asking that Councils would investigate the subject of a canal on the west side of Schuylkill from Fairmount to Mill Creek near Gray's Ferry, beg leave to—Report:

That in compliance with the spirit of the memorial, your committee gave notice of their readiness to hear what could be advanced as evidence, that the proposed canal would not be at variance with the City's prosperity; and our fellow citizens, Thomas Kittera and Thomas Mitchell, Esqrs, the former as counsel for the applicants, and the latter as one desirous of the measure attended the meetings of the committee, and took part in the proceedings.

Your committee after hearing for three evenings, testimony from gentlemen introduced by the Friends of the proposed canal, have come to the conclusion, founded as well upon the testimony adduced, as from a knowledge of the yet unimproved capabilities of the western front of the city to accommodate additional trade, and upon an appreciation of the expenditures, to the public and private, already made for future operations, as also upon the claims which the water works have upon the jealous regard of these Councils, that it is the duty of the Councils, not to change the course which they have pursued, with reference to the propo-

ed canal. And they therefore offer the following resolution:

Resolved, That the committee be discharged from a further consideration of the subject.

JOSEPH R. CHANDLER,  
MERRIT CANBY,  
RICHARD PRICE,  
JAMES BURK.

The undersigned, constituting the minority of the Joint Committee of the Select and Common Councils, appointed, on the 18th ult., to investigate the merits of the application to the Legislature for the incorporation of a company to construct a canal on the west side of the Schuylkill, from Fairmount to Mill Creek, beg leave to submit their views in relation to it.

Soon after the organization of the committee, at the request of various persons interested in this work, and on the motion of one of the committee, leave was granted to all persons feeling an interest in the scheme, to submit their views in relation thereto, and every facility was given to the receiving of evidence, either for or against the work.

Much valuable information was derived from persons connected with the trade on the Schuylkill, and acquainted with the character of the projected improvement, and the result of it has been, on the minds of the undersigned, a conviction that the work is one calculated greatly to promote the interests of the trade of Philadelphia, and thereby to advance the prosperity of our city. They are also of opinion that these results can be obtained without jeopardizing in the least the great interest which we all feel in the security of our water works, as to either the abundance or the purity of their supply from the Schuylkill. And they believe that this scheme can be carried into execution without materially interfering with any of the real interests of the city.

In order to appreciate the importance of this project, it will be well to bear in mind that the trade on the Schuylkill in front of the city was, so late as the year, 1825, confined to a few unimportant objects, employing only vessels of the smallest size, and requiring very little wharf accommodation; but that, since that period, a trade amounting already to upwards of 400,000 tons annually, has been created. Large as this may appear, it is but the forerunner of that which our city will soon command, provided a judicious foresight prepares the way for it, by affording to it accommodations commensurate with its growing magnitude and importance.—An examination of the progressive increase of the trade, shows that (with two temporary exceptions only, resulting from those vicissitudes to which all commercial communities are liable) the increase in the later years has been much greater than in the first years of this series. The whole of our wharves applicable to the purposes of shipment are now in demand, and the rents which some of them yields, would, a few years since, have been deemed incredible.

The objects which are brought down the Schuylkill are of the most bulky nature, and require extensive accommodations, while their low price, and small intrinsic value, render it desirable that they should be subjected to as small a tax for wharfage, storage, &c. as possible.

The evidence submitted to the committee, establishes the fact that the coal trade, which now constitutes somewhat more than half the business done on the Schuylkill, is subjected to very serious obstructions, such as are avoided by companies that ship their coal from depots situated elsewhere than in the city of Philadelphia. The transfer of coal from canal boats to the wharf, by the Lehigh Coal Company, at Bristol, and by the Delaware and Hudson Company, at Rondout, is effected with great ease; boats unload in a canal or basin at all hours, with every advantage of low wharves,

and security against accidents. On the Schuylkill, the case is otherwise; they are brought down into tide water, and hauled alongside of elevated wharves, constructed for the high tides of that river. This circumstance limits the unloading to a few hours, probably not more than three in each tide; and owners desirous of unloading two boats in twenty-four hours, at the same place, can effect this object only by having the work done at night, with all the objections to which night work is liable. From this cause, boats are often delayed from one to five days; the crews disperse, and the operation of unloading, which elsewhere is done by the boats crew, is here entrusted to a separate class of workmen, who charge a high price for their labor.—Their charge usually amounting to three dollars per boat, (averaging forty-five tons,) or about 6-2-3 cents per ton, would be readily saved, could the crew of the boat unload immediately on their arrival, as they do elsewhere. The arrangement of our wharves on the Schuylkill is unfavorable to the screening and handling of coal, prior to shipment. It is easy to conceive that a more favorable disposition could be obtained by means of a canal elevated six feet above tide water, as proposed by the petitioners, the effect of which would be to facilitate the screening of coal on permanent screens and to avoid at least one, and in some cases two handlings of the coal, and all the waste by breakage incident upon the same. Each handling of coal may be estimated at from eight to ten cents, and the waste at about ten cents per ton.

The freight from Pottsville to Philadelphia, last year, averaged about one dollar per ton assuming twelve days as the duration of a trip, and the average detention on the Schuylkill, below Fairmount dam, to be about two days, (which estimate accords with the evidence of competent and respectable witnesses,) it follows that on a load of forty-five tons of coal, during the last year, the boat's crew earned at the rate of \$3 75 per day; and that an improvement calculated to reduce the length of the trip by two days, would have effected a reduction of freights of about \$7 50 per boat load, or about seventeen cents per ton. If the trip were performed in ten days, as stated in evidence, the daily earnings would be \$4 50, and the saving twenty cents per ton. At present, the boats lie in the river, and are exposed to considerable injury, and some risk, from the fluctuations of tide, and from the heavy swells on the Schuylkill during stormy weather. Abundant proof exists that boats have been sunk between Fairmount dam and the city wharves; and in some cases even those that were fastened to wharves, have been endangered by occasional high tide, and south-westerly storms, or by heavy floods in the river.

From all these facts, the committee conclude that the reduction of charges on the coal trade which would result from the execution of such a canal, would be equivalent, as has been stated in evidence, to from forty to fifty cents per ton, while the facilities which it would give for the expansion of the trade, would be very greatly enhanced.

That this result is a desirable one, will sufficiently appear when we consider the very uncertain character of that trade, now in its infancy, but which, if duly favored, is destined to impart to our state a degree of wealth and importance unequalled by any state in the Union. And it behooves the citizens of Philadelphia, seriously to reflect upon the fact, that by the industry and enterprise of our neighbors, two of the three large depots of anthracite coal in Pennsylvania are now made to pour their wealth directly into the city of New York. Short as has been the period since the first application of mining to the large depots of Pennsylvania, we have already witnessed the order of nature evidently twice made to yield to the enterprise of man, and the product of our state directed from its natural channel to a new one.



The valleys of the Lackawanna and of the Lehigh, which at one time were thought to be the unalienable, as they were the natural tributaries of the Delaware, are now sending their produce directly to New York. The coal of the former crosses the Delaware at Carpenter's Point, to seek a distant market; and that of the Lehigh crossing the same stream at Easton, or at a lower point, will by means of the Morris Canal, but especially of the Delaware and Raritan Canal, seek a foreign market. While our citizens are lulled into security, our neighbors have been active in executing works by which nearly one half of the coal of Pennsylvania will pass away for ever from our markets to theirs. It is true we have it in our power to check their operations and to promote the success of our commerce. We may by increasing the facilities of the Schuylkill trade, and reducing the charges upon it, bring the coal of the Schuylkill into market, on more favorable terms, than those upon which the New York merchants can receive that of other depots by their canals; and it is unquestionably the interest of the city of Philadelphia to do so if she values the extensive coasting trade, and the influx of foreign capital which the produce of Schuylkill county can be made to procure for her.

The undersigned are further of opinion that as soon as the trade upon the Pennsylvania Canals shall have been created, as it must very soon be, the demand for wharf accommodation on the Schuylkill, for depots of grain and country produce, will be immense. The increase from this source alone in the ensuing ten years, will probably surpass, certainly equal that which we have witnessed from the coal trade in the last ten years. If the twenty-two millions of dollars which the State has invested in her public works, and the five millions expended by the Union Canal Company, and by the Schuylkill Navigation Company, are ever to yield, as we doubt not they will soon do, ample fruits, it must be by carrying upon the Schuylkill a trade of immense extent, requiring the most expanded accommodations. Already we have witnessed the existing warehouses on that river crowded with goods destined for the interior and with the return cargoes of flour, grain, &c. If moreover, we consider that all the Schuylkill coal required for the city consumption, must always be landed on this side of the river, we need entertain no apprehension that the execution of the canal on the west side will materially affect the value of our city front on the Schuylkill.

We will not pause to inquire into the direct advantages which the city might derive from this increased facility to the coal trade, arising out of the large and valuable tracts of Anthracite and Bituminous coal lands bequeathed to her by Stephen Girard, and Elias Boudinot; but we will call the attention of Councils to the great value which the new Almshouse property on the west side of the Schuylkill would acquire. It is in evidence before the committee that the front of that property on the Schuylkill could be immediately converted into depots for the shipping of coal, producing a large income to the city, if rented, or greatly reducing the amount of debt on that property if sold.

It should be borne in mind, that the city proper has a large interest, say from one half to two thirds, in the property and debts of the corporation of the Guardians of the Poor, that the expense of erecting the new Almshouse, including the purchase of the land, does not fall much short of one million of dollars, and that the tax upon the city for the support of the poor now rises as high as thirty four cents in the one hundred dollars.—The projected canal would pass through this property, for a distance of not less than 4000 feet, enabling the city to relieve itself by its advanced value from a very heavy burthen.

Indeed, the advantages which would result to the city from the execution of this work appears to us so direct and palpable, that nothing but a well grounded

apprehension that they might be accompanied by other consequences of an injurious character, can justify an opposition to it on the part of the city.

The objections which have been raised to it are:

1st. Its effect upon the Water Works at Fairmount.  
2d. Its injurious tendency as regards the health of the county.

3d. The withdrawal of a portion of the inhabitants from the city to West Philadelphia.

4th. The reduction in the value of our wharf property on the Schuylkill. This last objection we have already expressed our belief is unfounded. The first of these would, undoubtedly, be the most serious, if it were well founded; but, in the opinion of the undersigned, there is no reasonable ground for apprehension.

It has been said, that the reduction in the waters of the Schuylkill, occasioned by the construction of this canal, would endanger the supply of the city. If this opinion had not been advanced by gentlemen of known experience and judgment, the undersigned would scarcely have credited that such an apprehension could be entertained; and even now, with great deference to the judgment of others, they can scarcely forbear viewing it as one of the evidences of that nervousness with which every thing connected with the Fairmount Water Works is usually considered. Assuming the canal to be two and a half miles long, thirty feet wide at bottom, with a water surface of forty-five feet, and a depth of five feet, it will be found that its capacity is equal to 2,475,000 cubic feet; and its surface 594,000 square feet. The locks of the Schuylkill Navigation Company at Fairmount, are eighty feet long, nine feet lift, and their width is in one lock fourteen feet, in the other seventeen feet—giving for the average capacity of the locks 11,160 cubic feet. So that the whole capacity of the canal would fall short of 222 locks full of water.

It was proved before the committee by evidence of an experienced engineer in the service of the Navigation Company, that it is a large allowance to suppose that the loss of water in the canal by leakage and evaporation, would, after the second year from its completion, amount to forty-five cubic feet per minute per mile. At this rate, the total loss by leakage and evaporation daily, on the whole canal, would be 162,000 cubic feet, or less than fifteen locks full daily; and it would require upwards of fifteen days for the water to waste away, if no additional supply were introduced.—This is taken from the experience upon 123 miles or more on the New York canal. On the Ohio canal two experiments made by this engineer, the one on nine, the other on forty miles, gave for results a loss of thirteen cubic feet in the first, and of twenty five cubic feet in the second per minute per mile; which would greatly reduce the danger of waste of water from the making of this work.

But even admitting the largest loss which we have heard of, that which took place on the long levels, with extensive embankments, of the New York Canal, during the first year or two after its being opened, and before it might be said to be perfected, even then the loss is far from considerable. In this extreme case it is stated at 70 cubic feet per minute, per mile; which would amount on the projected canal to 252,000 cubic feet per day, equivalent to less than 23 locks full, and require near ten days for the canal to empty itself entirely by this means, if all access of water were stopped. A short calculation from these data proves that even at this extreme rate of loss, the total consumption of water by evaporation and leakage would during the whole season of navigation, scarcely exceed half the amount of water now consumed for lockage, even admitting that the arrangement of business were such that every chamber full of water that is now wasted passed two boats, one ascending and the other descending. According to the evidence submitted by a gentleman of

scientific acquirements who was examined before the Committee, the whole daily evaporation on two and a half miles of the canal, taken at the maximum of the results recorded by philosophers, would be only half the capacity of one of the chambers of the locks at Fairmount—a result so small, that after making the largest allowances for differences of climate or errors of experimenters, the quantity is scarcely deserving of notice. The evidence of persons familiar with the ground, over which the canal would pass, clearly establishes that, with due care, a very good and watertight work can be constructed. The blue clay which is found on part, if not on the whole of the line, is declared by competent judges to be almost impervious to water: wherever the canal passes through it, no leakage could take place; and where it does not occur, it could be readily brought to the spot so as to make the work watertight. But it is easy to secure ourselves against all losses by introducing a clause in the Bill, directing that gates should be placed at Fairmount, under the control of an officer appointed by the city, to be closed whenever a scarcity of water in the Fairmount dam, or the leaky condition of the Canal below, would produce an apprehension of an insufficient supply for the city Water Works. To this and other salutary restrictions it is understood that the applicants would cheerfully assent.

It has been urged, at this work would impair the purity of the Schuylkill Water. It is difficult to conceive how the water above Fairmount Dam on the east side of the Schuylkill could be affected by the operations of a coal trade on a Canal two miles below the dam on the west side. The opponents of the work have chosen to place themselves upon the horns of a dilemma on which we will leave them. Either the canal will be tight, in which case there will be no waste of water; or if it be leaky so as to endanger the supply of the City, the water in the canal cannot form the stagnant pool which it has been represented to be. The flow through the canal can always be regulated by the City Authorities, and unless there were a returning tide from the lower to the upper part of the Canal, which is impossible, the impurities which would arise from the occupation of it by boats could not be carried back to the wheels at Fairmount. It is, however, easy to foresee that if facilities are not given to the Coal Trade to establish itself on the Schuylkill below the dam, it will occupy the pool itself above Fairmount, and contaminate the waters at that spot. By means of the Penn Township rail road, coal landed at this place can be shipped with little expense on the Delaware; and by other schemes now in agitation, it may from the same spot be taken by Rail Road to landings at the mouth of the Schuylkill, where it might without any manual labour be screened and transferred from the Cars to the vessels engaged in the coasting trade. How far either of these outlets to the Coal Trade may be opened before long, the undersigned will not venture to decide; but they will express their firm conviction that in either case the accumulation of filth in the pool above Fairmount would seriously affect the character of the water used by our citizens.

The injurious tendency of the canal on the west side of the Schuylkill upon the health of the vicinity, has been urged with great zeal; but, in the opinion of the undersigned, with more speciousness than truth.—They are inclined to adopt the opinion of an experienced physician of our city, that the canal would, if properly constructed, rather be salutary than otherwise, as it would act as a drain, and lead to the recovery of the marshes that lie on the west side of the Schuylkill. As soon as the canal is made, those marshes will be reclaimed, the river embanked, and what is now a source of miasmata, will be converted into an active scene of health and business. As attempts have been made to create an impression that the sewer from the Almshouse would discharge its contents into the canal, the under-

signed deem it proper to state that the nature of the ground would forbid the execution of such a scheme, if other causes did not operate against so repulsive a thought. The sewer of the Almshouse will pass several feet under the bottom of the canal. It would be arched over, and entirely concealed from sight.

3d. The withdrawal of a portion of the population of the city to the vicinity of the canal has been alleged as one of the evils to flow from this work. The undersigned do not view it as likely to produce such a result. The business on this side of the Schuylkill will always be active, and require the labour of the same population that now works there. A new impulse would be given to the trade of the city, and any increase of population required by West Philadelphia will be drawn from other sources. At any rate, the traders in coal will always find it desirable for them to reside in the city, near to the centre of commercial transactions. The canal will only attract the class of persons actually engaged in handling the coal. If the canal be not made, the same population will be required in Spring Garden and Penn Township, or at the mouth of the Schuylkill, and the undersigned cannot discover how the circumstance of their leaving West Philadelphia would impair the prosperity of the city proper. The latter may be considered as the heart, the former as the limbs, and whatever produces a healthy growth, and thriving at the extremities must always promote strength and healthy action at the centre.

The undersigned have thus attempted to consider the advantages and disadvantages ascribed to this scheme. They may be mistaken in their views, but the result of a long acquaintance with the Schuylkill trade, and of a laborious investigation of this subject, is, that the proposed scheme is one which, far from militating with the real interests of the city, will advance them; that it is a work called for by the present exigencies of the coal trade; that if it be not executed now, other schemes less beneficial to the city will prosper at its expense; but that this work, sooner or later, must and will be done. That it is essential to the prosperity of Philadelphia, as well as to that of the state at large. They regret that the votes of Councils, both during the last and present session of the Legislature, indicate an opposition to this scheme; they respectfully suggest that the voice of the city should be heard as seldom as possible in the councils of the state in opposition to the great interests of the commonwealth. This opposition should be reserved for cases alone which are of vital importance to the city. Such a case they believe does not now present itself. As the majority of the committee have not deemed it expedient to report the information submitted to them, the undersigned have annexed what, after comparison with their own notes, they believe to be an accurate statement of the evidence, with two written communications. They report them in order that any member of Council desirous to do so, may have an opportunity to examine them for himself.

(Signed)

WM. H. KEATING,  
MANUEL EYRE.

#### MINE HILL AND SCHUYLKILL HAVEN RAIL ROAD COMPANY.

The President and Managers of the Mine Hill and Schuylkill Haven Rail Road Company, respectfully submit the following as their annual Report to the Stockholders:

There have been transported during the past year over the Company's road 41,529 tons of coal, and 1,087 tons of miscellaneous tonnage—the toll on which amount to \$9,326 24. The expenditures during the same period have been as follows: On account of repairs, \$2312 58; salaries and incidentals, \$1285 65; permanent improvements, \$3017 19.

On the first of January, 1835, the shares of capital stock issued amounted to \$122,450, to which must be added the mortgages and obligations, \$61,000, making a total of \$183,450.

By the preceding statement it will be seen that there has been this year a great diminution of the Company's business, contrary to the expectations of the managers, and the views entertained in their last report. This result is to be ascribed chiefly to the embarrassments which have so generally prevailed, by which some of the operators on the road were obliged to withdraw from the business, and partially to the surplus stock of coal on hand at the close of the last season.

It will also be seen from the statement submitted, that the item of repairs has been materially increased. In regard to this subject, it was stated in the last annual report, "The experience of the past year has shown that the increased amount of transportation on the rail road to Schuylkill Haven from the junction where the coal trade of the *west* and *west-west* branches unites, will expose the heavy (descending) track of that section of the road to an earlier deterioration than any other part of it." It was at the same time stated that the Board had in consideration the best manner of improving or renewing that portion of the road. The managers have now the satisfaction of informing the stockholders that as an experiment a single track of iron edge rails extending fifteen hundred feet, has been laid on the present sleepers.

From experience thus obtained, it appears to be the most judicious plan for efficiency and permanency that can be adopted. It can be executed in detail so as greatly to reduce the annual repairs, and without creating a burthen to the stockholders. The cost of this improvement, included under the head of permanent improvements, was \$1215 72.

As regards the prospects of the approaching season, the managers, notwithstanding the discouragements of the past year, cannot but entertain confident expectations of very favorable results. The supply of anthracite coal from all regions this year, is less by about 118,000 tons than that of the last year; and there is every reason to believe, from the increased consumption, that at the commencement of spring operations, there will be no surplus on hand.

Should this, so highly probable, be the case, a fresh impulse will be given to the coal trade; especially as those causes no longer exist, which, during the past year, have so affected its prosperity in common with other branches of industry.

As an index of the expansion of the company's business, and the capabilities of the road, the subjoined statement of operations since it was opened for trade is furnished:

#### (Coal and Miscellaneous.)

Tolls received in 1831,	\$2,563 03,	on	17,559 tons.
Do. do. '32,	14,803 07,	on	66,120 tons.
Do. do. '33,	17,193 39,	on	72,072 tons.

While the tolls, from causes explained, amounted in the year 1834, to only \$9,326 24, on a tonnage of 42,616.

The managers therefore believe themselves justified for the reasons stated, in estimating that the business of the next season will exceed that of the year 1833.

On behalf of the Board of Managers,

(Signed)

TIMOTHY Y. CALDWELL, President.

Philadelphia, Jan. 8th, 1835.

#### PENNSYLVANIA CANAL.

The following exhibits the business on the Canal, at Allegheny, up to the 2d of January, 1835, on which day the Canal was closed by ice—This was almost eight weeks later than the period at which, the Wheeling editor said, the Canal usually closed.

We have no hesitation in predicting that navigation may be recommenced by the 23d of February, which will be more than five weeks earlier than the time at which, the Wheeling editor said, the Canal usually opened—making a difference of thirteen weeks in the term of interruption.—*Pittsburgh Gazette.*

Collectors Office,  
Allegheny, W. D. Pa. Canal, Jan. 3, 1835. }

Whole amount received from Nov. 1,	
1834, as per last weekly statement,	\$3,115 45½
Amount received in the week ending Jan. 2, 1835,	32 89

Whole amount received to Jan. 3, 1835,	\$3,148 34½
10 boats cleared, having tonnage	lbs. 103,085
For. tonnage received from the East,	341,332

Total tonnage of the week,	lbs. 444,417
Extra—Wood, 40½ cords; Boards, 400; Passengers,	
147 miles.	

Amount of Coal sold on the line of the Canal between this place and Philadelphia, in the following years—

1826	3,154 tons.
1827	3,372
1828	3,322
1829	5,321
1830	6,150
1831	10,048
1832	13,429
1833	19,432
1834	18,572

*Miners' Journal.*

There are 60 acres in what is termed the "Spohn Tract." It is situated from two and a half to three miles from the landings. There is one vein of Coal about seven feet in thickness which runs through the property about 900 yards, and one vein four feet in thickness running some distance under the seven feet vein. The present proprietor paid \$16,000 for the property, and expended about \$2000 in improvements—making \$18,000. He has mined out of the tract about 20,000 tons of coal—sold the property, after all the coal is worked out above the water level, for 10,000—and has been offered \$8,000 for the coal yet remaining in the tract above the water level, supposed to exceed 20,000 tons.—*Ibid.*

#### LAKE ERIE.

There are now on lake Erie, *thirty-four* steam boats, of which *thirty-two* are owned in the United States, and over 150 brigs, schooners and sloops, besides a large number which belong on lake Ontario and the river St. Lawrence, but trade regularly with the ports on this and the upper lakes. The steamboats are confined almost exclusively to the conveying of passengers, at which they find constant and profitable employment, during the season of navigation.

About four-fifths of the business of the boats is done in their trips up the lake. Of course over one half of the passengers westward remain to populate the vast region, beyond the lakes. Of the actual emigration westward, it is calculated that less than one half go by steam boats, the remainder making their journey by land or on board the numerous other vessels which are fitted up in good style for comfort and pleasure. The emigration westward, through and by this place, during the past year, cannot be estimated at less than 100,000 persons. This number added to the hitherto immense population of those regions, and the prospect of a progressive increase of emigration annually for many years

to come, ought to awaken the attention of Pennsylvania to the importance of speedily providing a communication of *her own*, which shall afford her citizens an opportunity to compete for the immense trade thus opened and demanding an outlet to the Atlantic.—*Erie Observer*.

From the M'Kean Co. Journal, of Dec. 23, 1834.

Mr. Chadwick—I have raised this season from two bushels and one third sowing, (allowing two bushels to the acre,) seventy five bushels Barley Oats, weighing 30 pounds to the bushel. The land on which they grew has been cropped for five years in succession without any manure.—Some of the stalks measured six and a half feet in length.

IRA H. CURTIS.

Keating Township, M'Kean Co. }  
December 18, 1834. }

TAYLORSVILLE DELAWARE BRIDGE.—We learn that this Bridge is now finished in a very neat and substantial manner, and that it was formally thrown open for crossing, by the Directors of the Company on New Year's day. It will be a great accommodation to a large portion of the citizens of New Jersey as well as this state, being the only bridge over the Delaware river between Trenton and New Hope. We do not know the rates of Toll, but have understood that from the favorable terms upon which the bridge has been built that the Directors will be able to place the charges for toll at a very moderate rate.—*Bucks Co. Intel.*

#### STEAM BOAT NAVIGATION.

A gentleman in business, has politely furnished us with the following list of arrivals and departures of steam boats at and from the port of Pittsburgh, during the year 1834, viz:

Between Pittsburgh, Louisville, Nashville,	
" St. Louis, and New Orleans,	822
" Pittsburgh and Brownsville,	718
" Pittsburgh and Beaver,	612
" Pittsburgh and Wellsville,	82

Whole number, 1634  
Jan. 19, 1835.—*Statesman*.

#### APPOINTMENTS BY THE MAYOR.

*City Solicitor.*

Edward Olmstead.

*City Commissioners.*

Adam Traquair, President Samuel Harmstad  
William Farries Thomas K. Wallace, in  
[place of Thos. Estlack, resigned.]

*Collectors of Water Rents.*

James Hickey Armon Davis

*City Clerk.*

Robert H. Smith.

*Mayor's Clerk*

John B. Kenney.

*High Constables.*

John M'Clean Willis H. Blaney  
Samuel P. Garrigues William Mandry

*Superintendants for cleansing the city.*

Robert Patton James M'Intyre.

*Clerks of High Street Market.*

Peter Conrad James Spicer.

*Clerk of Second Street Market.*

Henry B. Gillingham.

*Captain of the City Watch.*

Robert R. Bell.

#### *Corders on Drawbridge.*

Jacob Lawrence Thomas Doughton.

#### *Vaccine Physicians.*

Dr. James M'Clintock Dr. Jeremiah M'Cready  
Dr. Wm. S. Zantzinger Dr. J. Duuott.

#### *Collectors of Vaccine cases.*

James Kerr. S. W. District Thomas Porter, N. E. Dis  
James Gladding S. E. " John M. Fernser, N. W. "

#### STATEMENT,

Showing the amount of Paper each Bank in the State of Pennsylvania, has in circulation, in Bills of the denomination of FIVE DOLLARS, as reported, to the Auditor General of this Commonwealth, from the 20th of December, 1834, to the 9th day of January, 1835.

Bank of Northumberland,	\$73,965
Wyoming Bank, at Wilkesbarre,	17,085
Lebanon Bank,	27,400
Kensington Bank, Philadelphia,	44,700
Bank of Germantown,	17,990
Girard Bank,	75,245
Bank of Montgomery County,	30,215
Farmers' Bank of Lancaster,	33,165
Farmers' and Mechanics' Bank, Philadelphia,	57,275
Bank of Penn Township,	47,005
Moyamensing Bank,	42,900
Southwark Bank,	38,545
Bank of the Northern Liberties,	59,924
Farmers' Bank of Reading,	61,525
Merchants' and Manufacturers' Bank of Pitts-	
burg,	96,000
York Bank,	24,155
Bank of Chester county,	34,755
Miner's Bank of Pottsville,	30,820
Bank of Chambersburg,	35,000
Doylestown Bank of Buck's County,	26,330
Manufacturers' and Mechanics' Bank, Phila-	
delphia,	61,365
Bank of Pennsylvania,	199,940
Mechanics' Bank of Philadelphia,	52,375
Columbia Bridge Company,	15,000
Bank of Pittsburgh,	136,950
Monongahela Bank of Brownsville,	47,550
Erie Bank,	24,730
Bank of Gettysburg,	17,245
Commercial Bank of Pennsylvania,	51,375
Philadelphia Bank,	59,000
Bank of Delaware County,	12,000
Harrisburg Bank,	71,000
Bank of Middletown,	31,985
Farmers' Bank of Bucks County,	19,060
Schuylkill Bank,	106,850
Northampton Bank,	87,885
Western Bank of Philadelphia,	71,560
Easton Bank,	84,000
Lancaster Bank,	29,585
	\$2,014,525

DANIEL STURGEON.

Auditor General's Office, }  
January 12, 1835. }

#### HISTORICAL SOCIETY OF PENNSYLVANIA.

The members of the Historical Society of Pennsylvania are informed that the Annual Meeting will be held at the Philosophical Hall over the Athenæum, on Monday evening, February 2d, at 7 o'clock. The attendance of the members is particularly requested.

J. R. TYSON, Sec'y.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.--NO. 6.

PHILADELPHIA, FEBRUARY 7, 1835.

No. 103.

For the Register.

## NOTES ON CUMBERLAND COUNTY.

FURNISHED BY REDMOND CONYNGHAM.

Cumberland was erected into a County on January 27th, 1749. Courts were directed to be held at some suitable place, until the necessary buildings were provided. Robert M'Coy, Benjamin Chambers, David Magaw, James M'Intire and John M'Cornick, were appointed Commissioners to select a plot of ground on which to erect the Court-house and jail.

Shippensburg was selected as a temporary seat of Justice.

Messrs. Lyon and Armstrong, were elected by the proprietaries to lay out a town on the road from Harris's ferry, leading through the rich valley of Cumberland, including the old stockade and blockhouse and extending over the big spring called Le Tort (now Letort,) after James Le Tort a French Swiss who acted as Indian Interpreter and Messenger to Government, and who had erected a cabin at its source as early as the year 1735.

Carlisle was laid out in pursuance to their directions in 1750, and in 1753 the seat of justice was permanently located at Carlisle.

1750. The early settlement of this county is intimately connected with a disputed claim of the lands on the Conodoguinet in Cumberland valley made by the Indians, but resisted by the Proprietary Government.

The Governor and Council supported the rights of the Proprietaries, but the General Assembly *those* of the Indians

The Shawnese and Delawares complained that they had been driven from their hunting ground by the conduct of the Proprietary Government, who had "surveyed all the land on the Conodoguinet into a manor contrary to treaty—contrary to faith without even purchasing the right to the soil."

The Governor directed that an investigation should be made into all the circumstances, and the result laid before the Assembly.

It appeared that about the year 1677, the Shawnese driven by persecution from Carolina and Georgia, came to the mouth of the Conestoga, and obtained the consent of the Susquehanna Indians to occupy the flats. On hearing of the arrival of Markham and Penn, commissioners in the Delaware, they went to Philadelphia and solicited protection which was granted. In 1682 the Chiefs of the Shawnese, Delawares and Su-quehanna Indians, met William Penn at Shackamaxon, who con-

firmed to the Shawnese and Delawares the promise of protection made by Markham.

From that moment numbers of families of Indians followed the sixty families who had sought and obtained a *resting place* in Pennsylvania, and settled upon the most fertile flats of the Susquehanna and Delaware.—The Delawares and Shawnese became dependant finally on the Northern Confederacy of Indians. Several Treaties or Indian Talks were held afterwards at different times, and in all of them references were made to the confirmatory Treaty of William Penn.

In the year 1757, the Assembly complained of the imperfect, incongruous and faint manner in which the Indian Treaties were expressed, declaring they were unintelligible. They urged the Governor to meet Teedyuscung at the proposed conference at Easton.—The Assembly were desirous of having possession of all the Treaties made with the Shawnese and Delawares including the Confirmatory Treaty of William Penn at Shackamaxon. A committee was appointed by the Assembly to obtain copies of certain Indian Treaties from Richard Peters, Clerk of Council. Mr. Peters refused.

The following letter was then sent to the Governor.

SIR:—

The application of the Committee of Assembly to you yesterday, was made in pursuance of an order of the House which was to inspect the minutes of Council respecting Indian purchases. They are desirous of seeing and having fair transcripts of all the Minutes that relate to the purchase made by William Penn about the year 1700 of the lands on Tobiecon, Neshamany, Lehigh and the Forks of the Delaware or any of them. The Minutes relating to the confirmatory purchase of the same Lands in 1737. The Minutes relating to the lands on the Brandywine. The minutes relating to the Juniatta and Conodoguinet purchases, and those relating to the purchase made at Albany."

JOSEPH FOX,  
WILLIAM MASTERS,  
THOMAS LEECH,  
WILLIAM WEST,  
JOSEPH GALLOWAY,  
THOMAS YORK.

July 13th, 1757. Richard Peters returned an answer.

"That he (the Governor,) will not permit you to inspect the Council Books."

The Proprietaries directed their agents after the Treaty made with the Indians in 1755. "That in all

sales made by them, they should take particular pains to encourage the emigration of the Irish into Cumberland County from Lancaster County as serious disturbances had arisen in consequence of disputes between the Irish and Germans at Elections. The Proprietaries desired that York should be settled by Germans, and Cumberland by Irish.

James Le Tort by some of the manuscripts, is stated to have penetrated to Cumberland valley as early as 1731. His *first cabin* was burnt by the Indians. It stood at the head of the spring. He received for his services twelve pounds annually.

### HISTORICAL NOTES,

*In relation to the Shawnese and Delawares.*

By REDMOND CONINGHAM.

The following question was put to Robert H. Morris, Esquire, Deputy Governor, by the Assembly.

"Do you know of any disgust or injury the Delawares or Shawnese had ever received from Pennsylvania, and by what means their affections could be so alienated as to take up the hatchet?"

Page 246, Franklin's Works, Vol. 2. also see votes of Assembly.

The Governor gave no satisfactory answer.

"Notice was taken by the Assembly of dissatisfaction expressed at an Indian Treaty held in 1753, by a Chief of the Shawnese, of a *promise* made to him on the behalf of the Proprietaries, which had not been complied with."

See page 259 of Franklin's Works, Vol. 2. also votes of Assembly.

Big Beaver, a Shawnese Chief, in 1753, at Carlisle, refers to a promise made by William Penn at Shackamaxon, of hunting ground for ever.

The House of Assembly, in relation to the Shawnese complaint, express themselves thus:

"We are, however, convinced by original minutes taken by one of the Commissioners at the Treaty of Carlisle, now lying before us, that the Shawnese Chiefs mentioned that claim of theirs to the lands in question at that time, and were promised that the matter should be laid before the Proprietaries. It was after the business of the Treaty was over, and not inserted in the printed account of the Treaty." "But one of the Commissioners, as appears by the report, forgot the whole transaction."

Franklin's Works, Vol. 2. page 278; also votes of Assembly.

Teedyuscung, Chief of the Delawares, at the Easton Treaty, referred to the promise made by William Penn at Shackamaxon.

"The Heathen Delawares nominated him (Teedyuscung) their Chief."

Loskiel's Missions, page 150.

Montour writes, "One of the Governors had been charged with suppressing or purloining the principal treaties made with the Delawares and Shawnese."

Teedyuscung in his eloquent speech, says, "Wyoming was given as a resting place for ever." "Onas promised at Shackamaxon, a resting place."

The Shawnese claim said they were permitted to occupy the flats at the mouth of the Conestoga, and were promised hunting ground, and protection, by Markham; that this promise was confirmed by William Penn at Shackamaxon. That a treaty of purchase was afterwards concluded with the Shawnese, of their claim to the lands they occupied on the Susquehanna, *they* consenting to remove to lands on the Conodoguinet, surveyed for their use by order of the Proprietaries.—The intrusion of the white settlers upon their hunting ground or resting place, proved a fresh source of grievance; they remonstrated to the Governor and to the Assembly, until finally they withdrew and placed themselves under the protection of the French.

### HISTORICAL NOTES.

By REDMOND CONINGHAM.

Culpeper, Surveyor General, in the year 1677, seized upon the Revenues and Government of South Carolina. In 1683, he was succeeded by Seth Sothel.

Several families of Indians planted their Wigwams on the banks of the Susquehanna, in 1678, having emigrated from Carolina, and many followed them in the year 1684.

In 1712, the Indians in North Carolina plotted the destruction of the whites, which was barbarously put in execution. Colonel Barnwell with a large force was sent from South Carolina;—he succeeded in defeating the Indians in a general engagement, and afterwards attacked and destroyed the town of Tuscarora. The Tuscaroras, in consequence, abandoned their possessions, and followed the Shawanese, who had settled on the waters of the Susquehanna, and finally formed a union with the Five Nations.

In 1715, a number of Indian families of the Yamassee, emigrated to Pennsylvania from Georgia.

The establishment of Wigwams in Pennsylvania by the early Indian emigrants, were objects of jealousy and dissatisfaction to the Five nations and the white settlers, hence the great desire of their Chiefs to obtain the protection of Markham and Penn's Commissioners, on their arrival, and the favour of William Penn, in 1682.

The gracious promise of protection made to those unfortunate Indians by William Penn at the Great Treaty, was no doubt the principal inducement to emigrate into Pennsylvania by the Southern Indians, who afterwards removed from Florida, Georgia, and the Carolinas.

OXEN.—The following is the live weight of a pair of oxen, rising six years old, owned and fed by Jacob Taylor, Innkeeper, New Garden, Chester county, which for beauty and quality, are seldom to be met with.

Near Ox,	2,299
Off Ox,	2,373
Aggregate,	4,672

From the Village Record.

DIARY OF THE WEATHER—FOR DECEMBER, 1834.

Days of month	Days of week	Sunrise.	Noon.	Sunset.	Sunrise.	Noon.	Sunset.	REMARKS.		
THERMOMETER.				WINDS.						
1	2	25	53	59	W	SW	SW	clear	clear	clear
2	3	48	50	46	SW	SW	NW	rain	rain	clearing
3	4	34	47	42	NW	NW	NW	clear	clear	clear
4	5	25	44	36	NE	NW	SW	clear	clear	clear
5	6	26	52	43	SW	S	S	clear	clear	cloudy
6	7	56	56	47	SW	NW	NW	rain	partly clear	
7	1	37	54	48	NW	S	S	cloudy	clear	clear
8	2	49	54	44	SW	SW	NW	rain	partly clear	
9	3	32	44	38	NW	NW	NW	clear	clear	cloudy
10	4	26	42	34	W	W	SW	clear	clear	clear
11	5	22	48	44	NW	SW	NW	clear	clear	clear
12	6	32	38	36	NW	NW	NW	cloudy	cloudy	cloudy
13	7	34	45	44	SW	NW	NW	partly clear	clear	clear
14	1	40	32	19	NW	NW	NW	partly clear	clear	clear
15	2	10	16	24	NW	SW	SW	cloudy	cloudy	cloudy
16	3	30	58	48	W	W	N	c'ear	clear	clear
17	4	20	25	24	NE	NE	E	cloudy	clear	
18	5	26	35	35	NE	NE	N	snow	misty	misty
19	6	33	35	36	NE	NE	N	cloudy	c'oudy	cloudy
20	7	33	36	37	E	NW	NW	cloudy	cloudy	cloudy
21	1	35	43	36	NW	N	S	cloudy	clear	clear
22	2	32	44	41	S	S	S	cloudy		partly clear
23	3	34	45	40	S		N	partly clear		
24	4	34	32	32	E	E	E	cloudy	cloudy	rain
25	5	34	36	32	N	N	N	cloudy	partly clear	
26	6	19	22	22	E	E	E	snow	snow	snow
27	7	24	35	32	SW	NW	NW	cloudy	clear	cloudy
28	1	25	29	26	NE	NE	NE	cloudy	par ly clear	
29	2	29	30	36	E	E	E	snowing	snow	snow
30	3	28	36	32	N	NW	NW	snow	cloudy	cloudy
31	4	31	47	37	NW	NW	NW	cloudy	clear	

The former part of this month was remarkable for the clearness of the weather. The latter part was comparatively cloudy, and attended with frequent falls of snow. There were six days entirely clear, and 15 others partly clear; eight days the sky was obscured by clouds during the whole of each day. Rain fell on six days, and snow fell on six different days, but the quantity on each occasion was small, with the exception of that which commenced on the night of the 28th, and continued until the forenoon of the 30th. The depth of this snow has been variously estimated. The general opinion of those whom I have consulted in relation thereto, is that it would measure more than a foot; but from several measurements which I made in the woodland and places where it was least liable to be affected by the winds, I am inclined to believe that it would not average more than nine inches.

There were five days on which the temperature was below the freezing point during the whole of each day—15—17—26—28—29. The coldest day was the 15th, at sunrise, at which time the mercury was at 10 degrees above zero:—And the following day at noon, was the warmest, being 58 degrees.

The average for the whole month was about seven degrees lower than the preceding month, being 31 degrees at sunrise—40½ at noon, and 36½ at sunset.

The Brandywine was frozen over for the first time this season, on the 15th.

The Eclipse of the moon on the 16th, was observed through an atmosphere overcast with clouds similar to those which prevailed during the late solar eclipse.

C. H.

West Bradford Boarding School.

RECOLLECTIONS OF THE LAST CENTURY—PHILADELPHIA.

We recollect when upon the square of ground extending from Chestnut to Market, and from 9th to 10th sts. there stood but one house, which was that of Mr. Markoe, fronting on Market street. The square was surrounded by a post and rail fence, and was covered with rich grass, and many is the butter cup, and four leaved clover that we have climbed over the fence to pull. Another quinge genarian desires us to state, that one of the finest English snipes he ever shot, was on that lot, at the northeast corner of Chestnut and Tenth streets, where Mr. Kelley's house now stands.

We recollect when the square on the south side of Pine street, between Fifth and Sixth streets, was a brick-kiln pond, and a famous place for skating. Many an urchin has broken in at a spot where a comfortable kitchen fire is now blazing.

We recollect when upon the spot where Abbot's brew house now stands, at the end of Pear street in Dock street, there was a high hill with its declivity to the north, which was a capital place for running down with sleds, in time of snow. The remains of that hill are still in part observable at the back end of the lot upon which Mr. Charles Wharton's house now stands on Second st.

We recollect when Peale's Museum consisted of a few objects, collected in an old frame building at the southwest corner of Lombard and Third streets.

We recollect when the only theatre which Philadelphia possessed, consisted of that large one story brick building, with its gable end fronting on South street, between Fourth and Fifth streets, which is still in existence, occupied as a distillery.—*Philadelphia Gaz.*

## THE NORTHERN DISPENSARY.

*Annual Statement of the Northern Dispensary, for the year 1834.*

There have been under the care of the Dispensary, from January 1st to December 31st, 1834, five hundred and fifty-one patients, viz:—

Remaining under care from last year, 11

Admitted since that time, 540

551

Of whom the number cured is, 421

Relieved, 25

Irregular, 26

Sent to Hospital, 3

Dead, 28

Remaining, 48

551

## RECEIPTS.

Balance on hand last year, \$311 64

Contributions, 225 00

Income of Wills' Legacy, 274 08

15 months interest on Lehigh loan, 122 40

Rents, 167 59

\$1100 71

## EXPENDITURES.

Medicines, &c. \$300 00

Bleeding, Cupping, and Leeching, 292 63

Taxes, 34 51

Printing, 13 50

Sundries, 5 37

Collector's Commissions, 26 74

Investment in Stock, 300 00

Balance in the Treasury, 127 96

\$1100 71

There is an instinct, deeply implanted in man, which prompts him to seek for the cure of disease in the employment of agents of a remedial character. The success which so frequently attends them, adds the sanction of reason to the impulse of instinct, for their use.

The force of our natural and acquired reliance upon the aid of medicine, can alone be fully appreciated by one who has suffered under sickness himself, or endured the anxiety attendant upon the serious illness of a friend. Such an one only can realize to himself, the severity of the affliction which would be added to the poor man's woes in the hour of his sickness or that of an endeared parent, wife or child, should he be deprived of the aid of those means which may rescue from death or relieve from agony.

Reflection upon this subject must cause those who have aided this institution by contribution or donation, to rejoice, since through their instrumentality, medical aid has been extended to a large number of deserving persons. It will also incite them to continue their support of a charity which diffuses its benefits wherever they are required throughout a district so extensive as to embrace the Northern Liberties, Kensington, Spring Garden, and part of Penn Township.

JOSEPH S. RILEY, President.

THOMAS TIMMING, Secretary.

## FIRES IN PHILADELPHIA IN 1834.

The annexed statement is copied from the record of fires, kept by one of the Fire Companies. It is believed to be as correct as such a record can be, although it

is impossible, without a great deal of trouble, to procure the exact amount of damage in every instance.

In January there were	11
February	12
March	8
April	17
May	4
June	6
July	8
August	3
September	3
October	4
November	6
December	8

Total, 90

Of which there were in the city,	37
Northern Liberties,	18
Kensington,	7
Spring Garden,	19
Southwark,	8
Moyamensing,	1

90

Total amount of damage, \$204,450. Of this damage more than one-half was done at the fire on Walnut street wharf, in last January.—*Penn. Inquirer.*

**ACCIDENT.**—We learn that yesterday morning, between 4 and 5 o'clock, two of the line of Passenger Cars arrived at the inclined plane, west of the Schuylkill, and one of them belonging to Peters' line, safely descended without the use of the stationary engine.—Shortly after this car had reached the bottom, one of the cars belonging to the People's line started, but the rails being wet, the breaks proved insufficient; the cars descended with great rapidity, and came in contact with the car that had previously descended in safety.—The shock was very violent, and the descending car was literally dashed to pieces; the other was considerably injured. Three persons sustained more or less injury—one of them, we learn, was severely hurt.—*Com. Herald.*

From the Village Record.

## WEST CHESTER RAIL ROAD.

At a meeting of the Stockholders of the West Chester Rail Road Company, held pursuant to previous notice, on the 19th day of January, A. D. 1835, at the public house of William Reed, in the Borough of West Chester, for the purpose of electing seven Directors of said Company for the ensuing year.

General JOSHUA EVANS was called to the Chair, and NIMROD STRICKLAND appointed Secretary.

Dr. William Darlington, President of the Company, read the Fourth Annual Report of the Directors, and also the Report of the Treasurer of the Company, which, on motion were accepted and ordered to be printed.

*Fourth Annual Report of the Directors of the West Chester Rail Road Company.*

In their last Annual Report, the Directors announced the fact of the opening of the communication, on the Columbia rail way, into the city of Philadelphia, which took place on the 25th of December, 1833. The passenger cars have been running twice each way, daily, between West Chester and Broad street, since that time, affording the most ample accommodations for travellers on that route. A line of burthen cars was also put on the road as early as practicable after the opening viz. in the month of February last, and



continues to make regular trips to the city, three times a week.

Very soon after the cars commenced running to Broad street, the Directors discovered that it would be indispensable to a convenient and advantageous transaction of business, that they should have a depot of their own at that place, for the reception of produce and merchandise, and for the shelter and accommodation of cars. Without such an establishment, it became evident that the operations of the Company would be liable to much inconvenience, and also to exorbitant charges for the requisite facilities and accommodations in the city. Under this impression, and a belief that property on Broad street would speedily rise in price, the Directors took measures, early in the season, to procure a lot suitable for their purposes, on which the buildings deemed appropriate to the object are now in a good state of forwardness. It is expected they will be entirely completed by the first of May ensuing.—The propriety of securing the lot at an early day is already confirmed: for the value of real estate on Broad street has been materially enhanced since the Company's purchase. The price of the lot was \$7,733 33, and the buildings are, by contract, to be finished for \$13,000. It is estimated that the turn out, the tracks in the yard, and the other fixtures and appendages necessary to complete the establishment, will cost about \$1500; and to meet this expenditure the Directors have obtained a loan.

The aggregate receipts for the last year, for tolls, passengers, and freight, as appears by the Treasurer's books, amounts to \$10,621 76

The expenses, includ. tolls to the State, were, 8,825 30

Leaving a Balance of	1,796 46
To this should be added the amount of outstanding dues to the Company for transportation,	1,321 28

Making altogether, \$3,127 74

The large proportion which the disbursements bear to the receipts, has arisen partly from the expensive organization of the double daily line of passenger cars, which the Directors were anxious to maintain throughout the year, for the better accommodation of the public; and partly from the heavy expenses inseparable from the business, both of the passenger and transportation lines, so long as the company may be dependent on others for the use of a depot in the city. The Directors indulge the hope, that the arrangements now made, and being made, will not only considerably reduce these expenditures, but also enhance the convenience and facilities of their future operations.

The following statement shows the kind and amount of transportation business to and from the city, by the Company's line of burthen cars, since February last, viz:

	TO THE CITY.		Tons.
	Bushels.	Pounds.	
Malt,	8,068	266,244	about 133
Lime,	1,455	116,400	58
Oats,	1,209	36,270	18
Iron,		29,220	15
Sundries, including Leather, Cotton Yarn, Flour, House- hold goods, &c.		181,157	90
		629,291	314
	FROM THE CITY.		Tons.
	Pounds.		
Coal,	571,200		285
Plaster,	168,000		84
Potters' Clay,	65,543		32
Cotton,	40,750		20
Sundries, including Merchan- dise, Household goods, &c.	1,161,376		580
	2,006,869		1001

Making altogether an aggregate of about 1315 tons of produce and merchandize, conveyed on the West Chester Rail Road, during the last ten months, by a single line of burthen cars. This amount is exclusive of the materials hauled for the Branch Rail Road, which consisted of 54,000 feet of Lumber and 35½ tons of Iron. The business, as yet, is evidently in its infancy; and the means of the Company are adequate to any increase which the wants of the community may require.

At the last annual meeting of the Stockholders, subscriptions of new stock, to the amount of \$10,000 were authorized, for the purpose of constructing "A Branch Rail Road, from West Chester Rail Road to some point on the Philadelphia and Columbia Rail way, in the vicinity of the Lime and Marble Quarries of the Great Valley." Subscriptions were accordingly received, and the Branch road, one mile and three-eighths in length, has been constructed, in pursuance of the authority given. The Treasurer's statement, hereto annexed, will show the amount received and expended, on account of that work; by which it will appear that it has been accomplished for something less than the sum subscribed. The subject of *damages*, however, on the line of the road, remains yet to be adjusted; and possibly some additional charges may yet be incurred, before the accounts are finally settled. Although the grading and superstructures were completed as early as July last, yet an unavoidable delay in effecting a junction with the Columbia Rail way, prevented a completion of the horse path until the middle of November. Since then the branch sustained an injury, near its intersection with the West Chester Rail Road, the repair of which has hitherto been prevented by the inclemency of the season; but it is expected to be finished during the present week. In consequence of these disappointments, the Branch Rail Road has not yet been much used; but sufficient has been done on it to ascertain that it will afford valuable facilities in obtaining Lime Stone from the Great Valley, and also in procuring Lumber, &c. from the Susquehanna.

The results of the Company's operations, for the past year, have already been adverted to, and are further exhibited in the statement of the Treasurer, appended to this report. As the terms of the subscription to the Branch Rail Road will require an exact settlement of the accounts of the Company at the end of six months from the completion of the said Branch—which will be on the 15th of May next—the Directors have judged it most advisable to defer the subject of a Dividend until that period; after which the holders of the Branch stock will be entitled to equal privileges and immunities with the other Stockholders, in proportion to the amount of stock held by them.

All which is submitted.

WM. DARLINGTON, President.

Attest,  
Wm. WILLIAMSON, Secretary.

### TREASURER'S REPORT.

Dr.

Statement of the account of the West Chester Rail Road Company for 1834.

To Capital Stock paid in	\$99,960 00
Receipts for Tolls, Passengers, Freight, Rents, &c.	10,621 76
Balance on hand at last settlement,	377 08
	<hr/>
	\$110,958 84

Cn.

By Cash paid for constructing road, buildings, cars, horses, &c.	\$98,542 48
Balance of Capital invested,	1,417 53
Expenses for Salaries to agents, repairs, keeping horses, Tolls paid to the State, &c.	8,825 30

By Balance, being profits exclusive of the out standing debts due the Company,	2,173 54
	<hr/> \$110,958 84

Dr.

Statement of the account of the West Chester Branch Rail Road.

To amount of Capital Stock paid in, January 5, 1835,

Cr.	
By Cash paid	92 90
Incidental Expenses,	
Do. Iron,	2,094 95
Do. John P. Bailey, Engineer,	480 00
Do. Grading Road,	2,092 77
Do. Construction of Track,	1,286 41
Do. String Pieces,	1,748 65½
Do. Sleepers,	567 00
Do. Horse Path,	118 50
Balance,	883 81½
	<hr/> \$9,365 00

All which is respectfully submitted, January 5, 1835.

WM. WILLIAMSON, Treasurer.

When, on motion of Coleman Fisher, Esq. it was

Resolved, That the thanks of the Stockholders be presented to the President and Directors, for the faithful performance of their duties during the past year.

The meeting then proceeded to the election of seven Directors for the said Company for the ensuing year, the Chairman and Secretary having been appointed to act as Judges therein,—when, on counting the votes, it appeared that Dr. William Darlington, Elihu Chauncey, Jonathan Jones, David Town-end, Jonathan Valentine, Ziba Pyle, and Eusebius Townsend, were duly elected.

JOSHUA EVANS, Chairman.

Attest,

NIMROD STRICKLAND, Secretary.

From the Montrose Volunteer.

PANTHER HUNT.

MR. FULLER,

Sir:—If you have a place in your columns you will oblige yours by inserting a Panther hunt that took place in this county on Friday the 29th November, in the township of New Milford, by myself and two others.

On Thursday last I took my rifle and went with Mr. Isabell and Mr. Gray to my timber lot, where we discovered a Panther's track. I immediately returned home for my hounds, and came back in the evening to the camp, where Isabell and Gray were waiting. We then prepared our provisions for three day's campaign; at day light took up our line of march, and soon came to the track,—then the business was that Isabell and Gray should follow the track, and I take charge of my dogs, as they were young and used to running deer—but they soon found what the game was we were after. We followed through all the rough thickets and hedges that could be found until about ten o'clock, when we came to the den of the panther; then my dogs were very fierce to go, but the Panther did not run, and we thought he was not started; but after following for about a mile, I observed that the Panther stepped very large; I bid my hounds go; they yelled from the jump—then we all put off on the clean jump but soon were encircled by laurels, briars and windfalls, and after a chase of about three-quarters of an hour, Trooper roared at the tree; I then with redoubled force pressed through the briars until I reached the spot, where I saw a large panther on a tree, with his tongue out for

breath—and I would not say that my tongue was not out too. I stood a few moments to get breath, whilst my dogs were at the root of the tree animating their courage by a continual roar. I then passed a few compliments with the forest gentlemen, and asked him if he was not ashamed to be booed up there by them roaring hounds. I then observed the panther to draw back his ears, and raise his tail and look down upon the dogs. I levelled my well tried rifle at his head, and let him have what he could not hold in his mouth.—My rifle being damp, the cap went slow, so that the ball went a little below his brains; he then wheeled round, with the blood flying; I turned my horn to the muzzle of my rifle, and down goes a loose ball; then I placed a bullet through his shoulders and down comes the Panther, mounted instantly by the dogs; up comes Gray by this time and shoots him through the head.—The Panther was 7 feet 8 inches long from the nose to the tail. He was judged to weigh one hundred and fifty weight. He appears to have been alone, and by all appearances has for a long time resided in his hiding place. I hope the citizens of New Milford and Great Bend will receive it as a favor at my hand, in destroying the common enemy.

CAPT. J. TREADWELL.

HARMONY, Dec. 2, 1834.

## REPORT ON INLAND NAVIGATION AND INTERNAL IMPROVEMENT.

Report of the Committee on Inland Navigation and Internal Improvement, relative to the use of the Rail Ways of the Commonwealth,—MR. MILLER, of the City, Chairman.

*Read in the House of Representatives Jan. 28, 1835.*

The Committee on Inland Navigation and Internal Improvement, to whom was referred a resolution of the House, passed 20th January, as follows:

“Resolved, That the Committee on Inland Navigation and Internal Improvement be instructed to report to this House, *without delay*, which, in their opinion, would be most beneficial for the interest of the Commonwealth,—for the State to furnish her rail roads with motive or other power, for the transportation of produce, merchandise, &c.; or to permit companies or individuals to furnish the same.”—REPORT:

That, aware of the importance of adopting some plan for the proper and efficient management of the rail roads of the Commonwealth, and the just anxiety of the House to obtain an early report, the committee beg leave respectfully, but earnestly, to urge the necessity of *immediate and energetic action* on the subject committed to their care. Not fifty days will elapse before the navigation of the canals will be open, and within that brief space of time there is much to be done. Legislative action must first be had, before the owners of the transporting lines now forming can determine on plans of operation on the road to which the additional inducement offered by the agents of the Commonwealth, by the reduction of the tolls, will doubtless attract a large amount of trade and travel, if they are not baffled by the adoption of injudicious measures, and driven from the channels of trade opened at the expense of the community, to others in which that community is not interested. The road must be stocked with the means of maintaining the motive power, and every arrangement made for the opening of the trade, with all possible celerity. Some locomotive engines are now ready; others are in preparation, and will ere long be ready to act: Those who have them, cannot long afford to keep them in their work shops unsold, and must dispose of them to others. They will be sold. Others cannot speedily be had to replace them, and the best

part of the transporting season will be lost to the community, by delay. Under these circumstances, delay is emphatically dangerous.

Your committee have been at a loss to determine what construction should be put on the terms of the resolution—Whether their inquiries were intended to be limited solely to the question of who ought to be the owner of *all the power* which it might be expedient to use on the rail roads of the Commonwealth; or, whether they were intended to extend to the *kind of power*, to wit, steam or animal power. As they could only infer the intention of the House, from the tenor of the debate in which the resolution originated, they have chosen to construe it on the broadest principle, rather than to those limits to which it seems to be confined by the terms in which it is couched.

The motive power produced by steam, is of two kinds—that which is produced by the stationary engines, and that which propels the locomotive engines. Your committee consider the absolute necessity of the use of steam power at the stationary engines, as unquestioned—that it must be supplied by the Commonwealth, equally so; and therefore dismiss this part of the subject and pass to the others.

The substitution of steam for animal power both in Europe and America, on nearly, if not all the rail roads known to your committee excepting where peculiar circumstances render it impracticable or unprofitable, would seem to be a sufficient reason why they should consider the question of economy to be settled in favor of the use of steam power. The progressive improvements which have been made in the power and adaptation to the motive effect of locomotive engines, and which leaves sufficient reason to hope for still greater improvement in their construction, while on the other hand no improvement can be effected in the strength of animals, and little in the manner of applying that which they already possess, affords an additional inducement to its exclusive use. The committee have not at hand any authorities to consult, which enable them to state the exact proportion which these two powers bear to each other in the cost of maintenance relative to their effect; but it is distinctly in the recollection of one or more members of your committee, whose duty it was to pay some attention to this subject on a former occasion, that it appeared from an account kept with great care and in much detail for a space of many weeks, of the quantity of coal drawn by locomotives and by horses under equal advantages, the expense of horse power was to that of steam as thirty-one for the former, to twenty-one for the latter. Other persons who have inquired into this subject, make the difference greater in favor of steam. The disadvantages arising out of the use of horse power may be thus enumerated.

Greater length of time required for the transportation of merchandise, &c. on a long line of road connected with a canal and interrupted by a Portage rail road, producing loss of time in transportation.

When the length of the Columbia rail way is considered, and that it forms an important link of a great chain of communication, connecting two places so remote as Philadelphia and Pittsburg; that the larger portion of the travel is by canal at a comparatively slow rate of progress; that this line is interrupted by a Portage rail way consisting of ten inclined planes and eleven levels; that it is highly important that it should attract to itself all the trade and travel which can be diverted to it from every part of the east and west by the various and superior facilities it holds out to the public; the importance of adding to these in every particular, and lessening or removing every thing which subtracts from them, cannot be doubted for a moment.

The following statement is believed to vary very little, if any, from the truth. Horse hire is estimated at 62½ cents per day, so as to include all charges of

wear and tear of harness, feed, duration of the horse, and every thing incidental. Length of the trip 3 days; load, 3 tons for each horse; car, say 1 to 1½ ton.

One trip from Columbia to Philadelphia.

Cost of horse power &c. Steam power, as intended to be charged if furnished by the commonwealth.

Difference in favor of steam.

1 man, 3 days, at 75	\$2 25		
1 horse 3 days at 62½,	1 87½		
Power at the planes, at cost, calculated on the passage of 360 tons per day, 8½ cts. each plane.	50	3 tons, at 82 cts. \$4 46	\$2 16½
	\$4 62½	per ton	72

COST OF SIX TONS.

1 man 3 days, at 75	\$2 25		
2 horses 3 days, at 62½	3 75		
Power at the two planes, for 6 tons,	1 00	6 tons, at 82 cts. \$4 92	\$2 08
	\$7 00	per ton,	34

COST OF NINE TONS.

1 man 3 days, at 75.	\$2 25		
2 horses 3 days at 62½	5 62½		
Power at the two planes,	1 50	9 tons, at 82 cts. \$7 38	\$1 99½
	\$9 37½	per ton,	22

Total cost of 18 tons, from Columbia basin to Broad street Philadelphia,	\$21 00	18 tons, at 82 cts. \$14 76	\$6 24
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Tons transported, 18 saving, 6 24  
34 6-100 pr. t.

Equal to 3 cents per bbl. of flour.

But this statement is too favorable to horse power, for the following reasons: In comparing the cost of transportation by horse power and that of steam, it should be borne in mind that the trade from Columbia to Philadelphia will consist mostly of the products of the forest, and of agriculture. These are heavy in comparison with their value; while the return trade will consist mostly of foreign merchandise and domestic or foreign manufactures, which are light compared with their value. A barrel of flour will not pay for a barrel of sugar; neither can a barrel of pork be exchanged for a cask of wine, a piece of cloth, or a bag of coffee. Hence the trade passing from an agriculturist to a manufacturing district, or a large seaport town, will, under ordinary circumstances, consist of heavy articles, and the weight of the return load in the case stated, cannot be fairly estimated at more than six tons, or one third of that taken to Philadelphia, while the time occupied, and the expense incurred, will be nearly the same as above stated. Bearing these facts in mind, the account will then stand as follows:

COST OF HORSE POWER AS ABOVE.			
18 tons from Columbia to Philadelphia,	\$20 25		
6 tons from Philadelphia to Columbia,	20 25		
		40 50	
Deduct cost of stationary power, both planes, for 12 tons, at 8½		2 00	
			\$38 50

## COST BY STEAM POWER.

24 tons, at 82 cents per ton,	\$19 68
Cost of six tons, from Philadelphia to Columbia,	4 92
	<hr/> 24 60
Difference in favor of steam,	\$13 90
Difference per ton,	59½ cts.

Thus it will be seen that to produce a result so favorable to the use of horse power compared with that of steam, the whole expense of each horse must not exceed sixty-two and a half cents per day—that each horse must draw a load of three tons, exclusive of one to one and a half tons, the weight of the cars—that the difference of expense in favor of steam when one horse and one car only are employed, is

	\$2 16 or per ton	72 cents.
On 6 tons, by two horses,	2 08	“ 34
On 9 tons, by three horses,	1 99	“ 22
On 18 tons,	<hr/> \$1 28	
Average,		7 cts. per ton.
While by the second and fairer estimate, the difference in favor of steam is,	59½ cts.	“

In all these estimates, the horse must travel at the rate of 28 miles per day, (Sundays excepted) the whole season on the average; one half of the time with a load of more than four tons each, car included; and the other half with a load of more than two tons, car included; the greater portion of the way on an acclivity while returning. If the return trip could always be accomplished in two days, the difference would be somewhat lessened, but the practicability of this is considered to be very doubtful, as respects the average of horses and days throughout the season.

To this difference in the expense must be added the difference in the time necessary to the performance of the trip, which is more than equal to two days, and equal in point of time to an increase of the distance from Columbia to Philadelphia, of 164 miles, and of course the same from Pittsburg to Philadelphia.

But the exclusive use of animal motive power on the road, will be attended with other great disadvantages: a horse path will be required, the cost of which is estimated at \$85,000; the annual expense of keeping it in repair is ascertained to have been \$300 per mile. To a waste of power arising from the necessity of using sufficient on the more level parts of the road to enable the horse to overcome the greater acclivities; interruptions arising from inequality in the strength and speed of horses; difficulty, if not impracticability of keeping up a uniform rate and rapidity of progress, occasioned by the carelessness or wilfulness of drivers, under any regulations which could be adopted; consequent interruption, delay and dispersion of trade to other and rival channels of conveyance. The road under such circumstances, would be peculiarly unfitted for the rapid conveyance of passengers, to whom it ought to afford facilities, and to whom it will, under proper management, be exceedingly and increasingly attractive. All the above disadvantages will be experienced whether the power is owned by the Commonwealth or a company. The use of the whole of the road by different companies, would be still more productive of all these inconveniences; and the indiscriminate use of the whole road by numerous individuals, would but increase the evil. The most advantageous use of horse power would be effected by confining the operations of companies to certain and limited portions of the road; but under any aspect of the case presented, it will not, in the opinion of your

committee, be found expedient to permit the use of animal power upon it, until time and experience shall prove its equal or superior advantages.

The indiscriminate or proportioned use of steam and horse power by whomsoever owned, would be still more disadvantageous. The expense of a horse path would still be required, for at least one track of the road, and while the inconveniences arising from the use of a crowd of horses and drivers, would be lessened—this advantage would be more than counterbalanced by the difficulty of adjusting their varying rate of speed. The difficulty will be aggravated by the use of both kinds of power indiscriminately by several companies, or by individuals in the ratio of their number.

The conflicting interests of several companies—and still more frequently conflicting interests of individuals—the neglect and caprice and wilfulness of their agents, would in their opinion produce a most injurious effect.

Should steam motive power be supplied by a company or companies, the question presents itself under different aspects; several methods of effecting it are offered for consideration. One is to permit several companies to furnish it for certain parts of the road to which their action may be limited respectively. This method would obviate many of the embarrassments incident to those already suggested arising from the conflicting interests of separate companies extending over the whole of the road. The predominating influence of corporate interests over the interest of the State in the preservation of the road, and the interests and convenience of individuals; want of harmony in their action as respects each other—and with those who carry the trade, &c. on the canals, would still be serious objections. Yet these objections would apply with more force if to these privileges to such companies were added that of being common carriers. In the latter case it would be difficult to prevent them from entering into commercial speculations, the tendency of which would be to the exercise of their power to convey their own merchandise to market while prices were high, while they neglected to convey that of other persons. The same objections though with less force, would apply to the motive power with or without the privilege of being common carriers, being placed in the possession of a single company. While on the one hand, a greater harmony of action would be insured, yet on the other, the public would be subjected to the power of a monopoly without the benefits of competition—and the same difficulty of confining their operations within legitimate bounds—the road itself not being their own property, would be liable to the same injury.

The plan of permitting a single company to furnish the motive power without that of becoming common carriers in the legitimate use of the word, presents itself to the minds of your committee as the most favorable of any yet dwelt upon, supposing their operations confined within proper limits: yet it could not but be less agreeable to our citizens, and more likely to affect their interest unfavorably, than it would be if left in the possession of the agents of the State, and regulated with a view to the common good, and the motive power at the same time furnished at the cheapest rate.

If the road is let to a company, that company must stipulate to charge no more than a certain price, either for the use of the power or for transportation, as the case may be. They must also carry all the trade that offers itself without delay, favor or partiality, and in a reasonable time. They must supply a sufficient number of engines, cars, &c. for the purpose. Suppose they should find it their interest to prefer one kind of transportation to another? The trade along the line to that from the western parts of the State. They may not have a sufficient number of engines on the road—How can they be compelled to add to their number?—Cannot they alledge the force of uncontrollable circumstances in their defence? The burden of proof to

the contrary must rest on the Commonwealth. Can she legally act with a promptitude equal to the emergency? Can she interpose with effect under circumstances requiring immediate and prompt remedy? It may be answered that such cases are not likely to occur. That a sense of their own interest will lead to a different course. That depends on the nature of the stipulations—if they have made an advantageous bargain, they will be inclined to make the most of it, and their advantages must be acquired at the expense of the trader or the State at large. But can they not be subjected to legal restraint? The arm of the law is strong—but slow to act, and the remedy comes too late to be effectual.

The Columbia rail road differs from all others known to your committee, in more than one particular. In all others the companies or individuals to whom they belong, are at the same time the owners of the road, of the locomotive or other motive power, if not the passenger cars, and hence being interested in every way in preserving them; while being transporters and common carriers, they have every inducement to preserve the good condition of every portion of their property, and the profitable use of it, which can only be effected by affording all the facilities of trade and travel which the case admits of, or are presented by their rivals. The Columbia rail road, on the contrary, is the property of the Commonwealth, and no other arrangement than the one now in operation, can place the State in the same relation, (excepting that they will not be common carriers,) to her roads, as these companies are placed in relation to theirs, than that proposed, to wit, furnishing all the motive power itself or by its agents.

The highway principle is under the present system adopted, so far it is thought to be expedient, and consistent with the interests of the Commonwealth and its citizens. Competition has full play in every thing but the ownership of the engines, and the supply of the motive power. Any person may own as many cars as he pleases—load them as he pleases—and for whom and at what price he pleases—attach them almost when he pleases—so as far on the road as he pleases, under such restrictions only as a due regard for the common interest imposes. It is the interest of the State to furnish the requisite number of engines and amount of power; and her means are equal to the exigency. She will furnish it at a lower rate, it is presumed, than individuals can; for they must charge a profit; and the State will only obtain her profits through the medium of the expected increase of tolls.

The competition expected from the exertion of individual enterprise, will, in the opinion of your committee, so far as respects locomotive engines, have little opportunity to develop itself, until time and experience have tested the merits of the highway system, should it be the pleasure of the legislature to adopt it. The purchase and maintenance of a locomotive engine, requires a considerable capital, consequently the number of competitors will be very limited, for they cannot but be aware that the next Legislature may repeal the acts of this. Confidence must first be felt before adventurers will invest their funds or those who stake their means on a venture, will assuredly charge the value of that venture on the citizen.

The committee will now inquire whether or not, their views are sustained by those of others more experienced, and who by their science, skill, and continued observation, are better qualified to arrive at just conclusions on a subject which has long occupied their attention, than your committee consider themselves to be.

An eminent engineer, Moncure Robinson, Esq. in a letter addressed to the chairman of a committee to whom this subject was referred in the session of 1832—3, Vol. 2. Journals of the House of Representatives, page 720, expresses his opinion to the following effect. That the Columbia rail road ought not to be made a public highway. That if for no other reason, not horse power but that of steam should be the motive

power used on the rail roads, because it would probably require four days to transport from Columbia to Philadelphia by horse power, while if locomotives were used, it might be accomplished in six hours. That the Philadelphia and Columbia road ought to be under the direction of a single head; and hence, as well as for other reasons there stated, it ought not to be thrown open to the public as a common highway.

The committee now respectfully beg leave to direct the attention of the Legislature to the report of E. F. Gay, Esq. to the canal commissioners—see their report to the Legislature, session 1835—4—which being the result of an investigation directed by the canal commissioners, by a gentleman whose opportunities of arriving at correct conclusions on the subject, at least so far as the Columbia and Philadelphia rail road is concerned, have been exceeded perhaps by none. Mr. Gay says:

“The Columbia and Philadelphia rail way is designed to connect the eastern extremity of the Pennsylvania canals with the city of Philadelphia, and by so doing, it forms a ‘link’ in the grand chain of communication between the waters of the east and the west; and is also destined, at no distant day, to form a part of the line of improvement which will extend from the city of New York to New Orleans. As the line from Philadelphia to Pittsburg is formed partly by canals and partly by rail ways, three separate transshipments must take place between these two cities, viz:—at Columbia, at Hollidaysburg, and at Johnstown. In order, therefore, to counterbalance the evil effects produced by the delays attending transshipments, it is highly important, if not absolutely necessary, that this line of rail way should, by its offering the greatest possible facilities for a speedy transit of freight and passengers, not only compensate for the inconveniences above alluded to, but, by its superiority in this respect, attract trade to the whole line.

“As a motive power upon rail ways, two species are used, viz:—animal and steam. I will, therefore, proceed to note the relative capacity and expense of each, as adapted to this road; first remarking, that the amount of tonnage taken by either, is calculated as being adapted to the grade at the *Gap section*, which, although it will limit the amount taken at each *bad* throughout the line, will, by its so doing, render the *trains* capable of travelling at higher velocities on other parts of the lines, and thereby save in velocity what is lost in power.

“An engine weighing six tons, can make the trip from Columbia to Philadelphia, drawing 20 tons exclusive of car, at an average rate of ten miles per hour: the whole distance will be passed in eight and one-fourth hours, allowing the engine to make but one trip per day. The expense, from the *best data* which I have been able to obtain, will be 12 dollars, and to convey the same amount of tonnage by less power, will require six horses and three drivers for three days, at an expense of 18 dollars, making a difference in expense of six dollars, in favour of steam, exclusive of repairs of the horse path.

“I now proceed to note the injury likely to result to the road from the use of each: Slight undulations in the surface of the rails, formed by the setting of the blocks or an uneven joining of the rails, tend to produce a series of concussions between the wheel *flanges* and rails, which are more or less violent, in proportion to the velocity of the body moving, and tend to separate the rails; from this cause, therefore, so far as *velocity* is concerned, the road would receive most injury from the use of *locomotives*. The same result is, however, produced by horses constantly travelling in the centre of the track, which, by compacting the materials forming the horse path, together with the pressure of the cars, tend gradually to force the blocks apart; the injury, therefore, resulting to the track from this cause, being in both cases similar, the expense attend-

ing the re-adjustment of the rails and blocks will, with the use either of *horse or steam*, be nearly the same.

"In the above comparison, I consider myself fully sustained by the operations attending the repairs on the eastern 22 miles of this road, during the past season. It remains for me now to mention the last, and by far most important item, which will form a difference in the expense of using steam or horses, viz:—*the horse path*.

"Upon the 60 miles of road now being made on this line, a horse path of stone is not contracted for, and if steam is used as a motive power, it will not be required; but if horses should be used, then in the original construction of the road, an additional expense of 85,000 dollars must be incurred, the interest on which should be added to the cost of transportation with horses, together with the repairs of the horse path, which, if I may judge from the repairs of the past season, cannot be less on an average than \$300 per mile; and this, for 77 miles, (the distance between the two inclined planes, as horses must be used on the balance of the road) gives \$23,100 per year, applicable solely to the expense of transportation with horses.

"With this view of the subject, showing the saving both in time and expense to be decidedly in favour of the transportation being done with *steam locomotives*, and believing them best calculated to accommodate the public interest, I cannot hesitate to recommend steam as a motive power, to be used between the two inclined planes.

"During the past season, a disposition has been manifest on the part of many respectable inhabitants residing along the line, within twenty miles of Philadelphia, in favour of the promiscuous use of horses upon the road, by which means the products of the country would be taken to market in cars.

"If this, therefore, should be the case, the rail way contiguous to the city would be literally thronged with cars at least four days out of seven, to the serious delay, if not entire exclusion of passenger travelling, and the great carrying trade between the east and the west, which is of the highest importance to the system of internal improvement now in progress in this Commonwealth. It is not my desire to throw any obstruction in the way of a free use of the road by the inhabitants residing along the line; but it must be manifest, from a slight view of the subject, that a multitude of horses and cars, travelling on the road at various degrees of velocity, would be productive of repeated and vexatious delays, which would be altogether detrimental to the reputation of the road, as a medium of transportation between the canal and tide water. Believing, therefore, that horses cannot be advantageously used upon the road, I have no hesitation in expressing my confident assurance, that steam as a motive power, if properly systemized, and judiciously used, can be made, (in the greatest possible degree,) to accommodate the wants of the carrying trade, as well as the inhabitants residing along the line. It remains for us to inquire by whom, and in what manner, shall locomotives be used. On this point I have only to declare my decided concurrence, with your own sentiments, as expressed in discussions of this subject at various times during the past season, viz: That *Locomotive engines* should be purchased, placed upon the road, and used by the *Commonwealth*, as a motive power between the Columbia and Schuylkill inclined planes. In consequence of the great *wear and tear*, which would be likely to attend a promiscuous use of burthen cars, belonging to the State, from carelessness of individuals not having an interest in their preservation, it is proposed that any individual, or company of individuals, who desire to use the road, shall furnish their own cars, either for freight, or passengers, and make their own arrangements for taking them either to, or from the foot of the inclined planes.

"In concluding this subject, I will only notice one,

among many important reasons, which suggest themselves to me, in favour of the motive power upon this road, being furnished by the Commonwealth.

"In so extensive a line of communication as one between the Delaware and the Ohio, it is confidently believed that no single individual can either from want of means or other causes, so far extend and systematize his operations, as a forwarding merchant, as to embrace the whole length of the improvement, and ensure certainty and despatch in the transportation of freight. It follows, therefore, that the *great carrying trade* between the points above mentioned, must and will be done by transportation companies; and if this be the case, it cannot be supposed that each of these companies could be allowed to place their own locomotive upon the road; the consequence of which would be, to create a spirit of opposition, that, by an injudicious use of the engines, would be destructive to the road, and also tend in a great measure to exclude individuals from its use, who are not able to purchase a *locomotive*; nor can it be supposed that these companies, who have such a variety of interests, would unite and form one company, for the purposes of transportation upon the rail way. It, therefore, a separate company, or companies, be incorporated to use this road, who have no interest in common with the others, then the chain of communication, so far as it regards responsibility, is broken, and a great variety of interests will become dependant upon the caprice of a company of individuals, who will always confer favours or give preferences, as may suit their pleasure or convenience.

"But on the other hand, if the motive power is furnished by the Commonwealth, every operation relative to its use, can be completely systematized, which is a matter of the highest importance in the use of *locomotives*; and any individual who desires to use the road, has only to pay his toll, attach his car or cars to the engine, in turn, as he may arrive, and soon be set down at the point of his destination. By this arrangement, no preferences or prejudices will be likely to prevail, so as to interrupt the regularity of trade, which its adoption is calculated to ensure."

One year later, after experience had tested to a certain extent the correctness of the views, that gentleman continues to entertain the same opinions—See report of Nov. 2d, 1834, to canal commissioners.

In a letter to the chairman of your committee, he ably sustains his former views, as follows:

"You desire such a statement of the practical inconvenience of throwing the Columbia and Philadelphia rail way open as a public highway, as my experience may suggest. I have always supposed that the plan proposed for using the road, viz. The motive power to be furnished by the State, and individuals to furnish cars, and do the transportation, was in effect *throwing the road open to the use of the public*: but presuming, that, by the word *public*, you mean *indiscriminate* use of the road, I shall endeavor briefly to give you such reasons against the measures as my experience will justify.

"A rail way differs from a common road, in one essential particular, viz: all vehicles travelling upon a rail way cannot deviate from a single track, except at points especially prepared for such deviation. Whereas on a common road, persons travelling, are not confined to a particular track, but may accommodate themselves by deviating to the right or left, as may suit their pleasure or convenience; it follows therefore, that upon a rail way, when a large amount of trade is done, serious inconvenience must be experienced, unless the rate of speed travelled upon it is nearly uniform.

"Upon the Columbia and Philadelphia rail way, if horses should be used, about six hundred cars will be required to do the *coal and canal* trade, of the ensuing season. These cars distributed over the road, would give about four to each mile, travelling each way, per day. There are already about forty private sidings

constructed by individuals, at different points on the road, and as many more will probably be put in, which will average about one to each mile; all the individuals owning turnouts or sidings, propose to use their own cars.

"The experience of the past season has clearly proven, that burden cars carrying three tons, cannot be drawn at a rate exceeding, *on the average, four miles per hour*—with these facts before us, it must be evident, that with six hundred cars on the road, (a large portion of which, will be owned at intervening points on it,) having different hours for starting and different places for stopping, travelling at different degrees of velocity, according to the amount of their loading; there would be no possibility of enforcing any code of regulation, so as to prevent the frequent and vexatious collisions and interruptions consequent upon the great variety of interests concerned. Except for speed, rail ways would be of little use. The public would be better accommodated with M'Adamized turnpikes; but for attaining speed, so necessary on an extensive thoroughfare, a rail way is decidedly superior, when steam can be used, which indeed I consider the only motive power that should be used upon any rail way over ten miles in length. Should a promiscuous use of horses be permitted on the Columbia rail way, the great number of burden cars, and their slow rates of travelling, would necessarily exclude from the road, passenger travelling—which at present, bids fair to become a profitable source of revenue on this rail way.

"The idea of allowing individuals to use steam if they please, is so extremely objectionable, and one which if carried into effect, would bring nothing but ruin to the rail way, and be of no benefit to the public, that I deem it unnecessary to make any further remarks in relation to it."

The committee are authorized in stating, that the following is the plan of operations on the Philadelphia and Columbia rail road:

"1st. As many engines as may be required for that purpose, shall be employed for the purpose of transporting all passengers travelling through between Columbia and Philadelphia. These engines will not stop at any intermediate points, except for the purpose of being supplied with water.

"2d. A number of engines, corresponding with the amount of trade, shall be employed for the transportation of freight passing through between Columbia and Philadelphia, and are designed for the transportation of such articles only as pass upon the canals.

"3d. A sufficient number of engines will be provided to convey all passengers travelling to and from points intermediate between Columbia and Philadelphia. These engines are to stop for the purpose of taking in or letting out all way passengers, whenever desired.

"4th. As many engines as may be found necessary, shall be employed in the conveyance of all the local trade of the country through which the rail way passes.—These engines will stop at any private siding for the purpose of attaching or detaching cars."

Admitting the correctness of the conclusions of your committee, so far as they respect the owners and the kind of power owned or to be owned on the Philadelphia and Columbia rail road, your committee believe that their application to the circumstances attending the Allegheny Portage road, is fully justified, at least so far as respects the arrangements of the present year, with certain exceptions. Hitherto it has been used nearly as a public highway, but such have been the difficulties which have occurred in conducting the business done upon it, that your committee have been informed by respectable and well informed persons, that under the present arrangement, the practicability of retaining suitable persons there as agents of the State, is very doubtful. Considered as a link of the chain where it is all important to preserve absolute harmony

of action, order, regularity and despatch—that it consists of ten planes and eleven levels—that all the parts of the machinery, animate and inanimate, must, in order to answer the intended purpose, be impelled under the direction of one principal—one main spring, and well adjusted wheels,—the inference of your committee is that it should be left in the hands of the agents of the Commonwealth; admitting, nevertheless, as much room for the competition of individuals as is consistent, in their opinion, with the general object and the interests of the Commonwealth as such, and of its citizens. With this view they have reported the bill (81) on your files, which, while it provides for retaining the direction of the animal motive power, leaves the ownership in the possession of individuals.

A letter addressed to the chairman of your committee, at his request, by a late agent on this road, forms a valuable part of this report, and is corroborated by the letter of another, addressed as above.

HARRISBURGH, January 14, 1835.

Sir—In accordance with your request of last evening, I now proceed to give you my views relative to the best manner of using the Portage rail road. Having performed the duties of superintendent of transportation during the period that it has been open for public use, I have become intimately acquainted with all the minutiae connected with it. I will give as briefly as I can the result of the experience obtained during the past season. The plan of transportation hitherto pursued, has been as nearly that of a public highway as the nature of the road admitted. The moving power on the levels being owned and managed entirely by private companies or individuals, whilst that on the inclined planes, alone, remained in the possession of the agents of the Commonwealth; who had no control over the movements of the cars or horses, except to fix the time of their departure from certain points, and their rates of speed. It does not, however, follow that the authority to decide upon the proper rate of speed to be kept by these using the road, includes the absolute power of regulating it where many individuals with separate and even conflicting interests are concerned; and in the case of the Portage, consisting of ten inclined planes, varying in length from 1400 to 3100 feet, and in height from 130 to 308 feet—and eleven levels varying in length from one fourth of a mile to thirteen miles, this has been already fully proven. Upon the opening of the road in March last, there were but few cars running, and the delays from want of regularity, were unimportant. During the season, the number of transporting companies was increased, and it was discovered that the difficulty of regulating the transportation was augmented in proportion. More cars were of course requisite, and with new companies came new interests which could not always be in accordance with each other. The various plans pursued by the transporter will tend to show, what different views were entertained by them as to the most convenient method of using the road. One company adopted a system of relays of horses and drivers—placing a train of four cars under the charge of a conductor, who travelled with it through the route. Another company purchased horses and employed conductors and drivers, without having relays of either. Others hired the horses or contracted with individuals owning them, to transport for them at a certain sum per ton. In addition to these there were a number of individuals, each owning a few cars, who were engaged in carrying coal, brooms, lumber, &c. No set of regulations that would accommodate either of these classes could be equally satisfactory to the others. The time of starting the trains was maintained throughout the season with tolerable regularity, but it was impracticable to establish a regular rate of speed. With the comparatively limited trade of the past year, it was not unusual to start ten trains per day, from either end of the road. Scarcely two of

these trains would travel at the same rate between the inclined planes, which of course separated them. The forward train would sometimes stop, or travel slowly, and the delay of one would extend to all the trains that succeeded it. It was often exceedingly difficult to arrive at the true cause of detention. Sometime the trains were detained unavoidably at the inclined planes by slight derangements of the machinery. In such cases no blame whatever would attach to those having charge of them. But where the conductors or drivers were actually guilty, it was not often possible to obtain evidence that would convict them. The agents of the Commonwealth had no *direct control* over them, nor any better means of punishing a single individual for an infringement of the railway regulations than that afforded through a court of justice: which has proved too uncertain and ineffectual, under the peculiar circumstances of the case. This difficulty must always exist, if the road is used as a public highway, unless a very expensive police with well defined powers should be established throughout all the levels on the road.

There were delays in the transportation during the past season, which would only be incident to a single track, and others occasioned by the loading and unloading of materials for the *second track*, which will be obviated in future by its completion. I think however, that under a *public highway system*, the large increase of trade and the addition of many new and opposing interests engaged in carrying it, will more than counterbalance the advantages of a double track; and that under such a system, the difficulties of managing the business on the Portage rail road, will increase in a greater ratio than the tonnage.

It may not be generally known that on nineteen miles of the Portage rail road, where horse power has heretofore been used, and will probably long continue to be the best power, there are about five miles occupied by *inclined planes*, on which the horses are entirely useless; they are in fact exposed to eminent danger from the cars which are always in motion when the horses are about the planes. But the danger is only a part of the consideration. The horses in passing up and down must expend a considerable portion of their muscular strength, without assisting in the slightest degree the transit of the cars. In answer to this, it may be asserted that the owners of cars may employ power only on the levels, but this would be found too expensive for one transporting company; unless that company had command of all the trade of the road. In the report of Mr. Welch, the principal engineer of the Portage rail road, dated October 30th 1834, you will find his calculation of the cost of transporting on the road for the season of 1835. He supposes 50,000 tons to be passed each way; which amount from the knowledge I have of the preparations and managements made by the transporters, I should consider a moderate estimate. The number of horses required to perform the labor, according to his calculation, is 53; and the number of men who will have the immediate charge of the horse power 24. This calculation supposes that seventeen miles of the road are worked with locomotives.

He has made liberal allowances for wear and tear of all the motive power, renewal of engines, &c. He estimates the cost of carrying one ton across the road at 79-80 cents. On the level parts of the road the cost is estimated at 32½ cents. This is the portion where motive power was furnished by individuals during the season just passed, for which they paid from \$1 to \$1 25 per ton. Some of the levels are so short that one or two horses can carry the amount estimated (100,000 tons) over them; but it could not be expected that separate companies would combine together and furnish the power on the levels jointly. Consequently they would be compelled to employ a large surplus power, or fall back to the plane in which power is wasted in the passage over the inclined planes.

Some of the causes I have mentioned as operating

unfavorably towards a system of public highway on the rail road, may appear trifling in themselves, but from frequent repetition will be found to constitute serious obstacles when taken in the aggregate.

Although no longer in the service of the Commonwealth, yet having been engaged in this work from its commencement, and having had practical experience of the difficulties which attended the management of the transportation through the year just past, I feel anxious that the system adopted for the future should be the best possible. Whatever plan may be deemed best, it is important for the transporters, and for the interest of the State, that it should soon be decided upon, as the time for making the necessary preparations for carrying it into effect, is already very limited.

I am, very respectfully,

Your obedient servant,

W. MILNOR ROBERTS,  
*Civil Engineer.*

Late Superintendent of Transportation.

ABRAHAM MILLER, ESQ.

Chairman Committee Internal Improvement

HARRISBURG, Jan. 14, 1835.

ABRAHAM MILLER, ESQ.

Sir—Having read a communication made to you this day, by Mr. W. Milnor Roberts, on the subject of the transportation on the Allegheny Portage rail road, it may be proper for me to state that I *fully concur* in his statement of *facts*.

Having been upon the Portage rail road during the past year, as principal assistant engineer upon the second track, I have had constant opportunities of observing, the manner of transporting upon the first track; and I am clearly convinced that if the road is used as a public highway, during the year 1835, difficulties and delays will increase with the increase of trade, to the great injury of the interests of the Commonwealth.

The transporting companies are anxiously awaiting legislative action concerning the motive power to be used in the *coming spring*; and so far as I am acquainted with the sentiments of the gentlemen concerned in those companies, they think that the *Commonwealth ought to furnish the power*, in order to insure *regularity and despatch* in the transit of goods over the *Allegheny mountain*.

Very respectfully,

Your obedient servant,

S. W. ROBERTS,  
Prin. Asst. Eng'r. Portage rail road.

If in the conclusions to which your committee have arrived, it should appear that they have sought for truth and found error, they must submit to the better judgment of the Legislature, but they take occasion to remark that on a subject so important, involving so many details arising out of the variant circumstances of a country so extensive as that through which these roads pass, and the still greater extent of that with which they are connected, that preconceived opinions, originating in partial views of the subject, want of proper and extensive information, and other causes, tend continually to enshroud the subject in doubt—to control the judgment of many who may have formed other opinions, which to them appear equally well or better founded—they are far from arrogating to themselves infallibility of judgment. Under such circumstances, it should occasion no surprise if longer experience in the use of the roads, should prove that they were not free from the charge of imperfect judgment. To arrive at a full and entire conviction, it would be necessary to be daily on the road when it shall be in full operation, under *some system*, to witness its effects wherever and on whomsoever they might bear, before the merits and defects which might characterise it could be ascertained. With this view of the question, what is the dictate of wisdom? To select one of many discordant theories,



untested by any experience whatever—or select that which experience, however limited, has pointed out as the best calculated to serve the purposes of the public, and the interests of the State. There can be but one opinion, as your committee think, on the subject.

Should the plan now proposed be found after sufficient time has elapsed to develop all its merits, all its defects, inexpedient, it will be in the power of the Legislature to devise another, aided as they then will be, by the full, broad light of experience, the glimmerings of which are, as yet, alone visible. But admitting that it would be equally wise to try any other system than the one recommended, it appears to your committee exceedingly imprudent to advance in the dark in a path which it will be found difficult to retrace, when it may be found equally difficult to proceed.

Suppose the motive power to be furnished by a company—by several companies—by individuals—whether these companies are carriers or not—independently of objections already stated, it would be well to estimate the difficulty of changing the plan when it might be found no longer expedient to pursue it. The influence of the agents of the state is apprehended by some.—Your committee do not feel disposed to add to the number of those who are supposed to be made subservient to its will by their interest. But there are other influences which ought not to be contemplated without a due sense of their importance. The influence of personal interest, of sectional interest, of corporate interest—under the apprehension of a change which would operate unfavorably on numerous individuals directly or through corporations in which their interests are invested, you will find a *legion* operating on the members of this legislature by every practicable means. And we might reasonably expect to find that influence exerted within your legislative hall even by members of this body. It would not be a new consequence of the developments of the selfish principle. It has often been seen and felt—it will be seen and felt again.

But waiting for a moment all objections to every plan proposed by others, your committee would respectfully urge the pressing nature of the motives which seem imperatively to ask the further sanction of the Legislature of the system already in operation. The navigation of the canals of this Commonwealth begins about the 10th of March. The prospective view of the trade which will pass upon them is exceedingly promising. The merchants of the west are now crowding to the cities of the Atlantic. They look to your rail roads and canals as the means of conveyance. Associations are now forming for the purpose of transporting their merchandise. They cannot digest and put in operation plans which require extensive arrangements until this Legislature has first pointed out the course which it means to take. They await your early decision. There is no wisdom in delay—there is danger. Our indecision, will induce these merchants to write to their friends in the west—"Look not to the Pennsylvania canals as a mean of conveyance. No system has yet been adopted, it will be idle to wait the tardy movements of her rulers." Thus will the advancing tide of trade be rolled into other channels and the hopes of a plentiful revenue be blasted.

Under these convictions your committee again earnestly recommend prompt and efficient action—and report the annexed bill.

#### AN ACT

Providing for the payment of the expenses incurred by the contracts made for the purchase of Locomotive Engines.

SECTION 1. *Be it enacted &c.* That there be and is hereby specifically appropriated the sum of \$144,900, for the payment of the expenses incurred by the purchase of locomotive engines, as authorised by an act of the Legislature, passed on the 15th of April, 1834.

#### REPORT OF THE MINORITY OF THE COMMITTEE.

Report of the minority of the Committee on Inland Navigation and Internal Improvement, relative to the use of the rail ways of the Commonwealth.—By Mr. WALKER.

The undersigned, a minority of the committee to whom was referred the resolution passed by this House, directing a report without delay, to be made, which would be most for the interest of the state—for her, for companies, or for individuals to own the motive power upon our rail roads, make the following report:

They regret the necessity that compels them to dissent from the majority. They know that a report sanctioned by the whole committee, would be entitled to, and would receive a more general and cordial support in this House. Nothing but an entire conviction that the interest of the state demands a change in the management of our rail ways, could induce them to make this their counter report.

The question, by the resolution submitted to the committee, is one of paramount interest. It interests the east and west, the north and south of this state. It interests the commercial, the manufacturing and agricultural portions of our citizens. It goes further, for it is intimately connected with the reputation of our improvements, and the finances of the Commonwealth.—It is therefore, worthy of the best deliberation.

Under this resolution, the first question that presents itself is:—What kind of power should be used upon the road—steam or horse?

Upon this question, it is believed the committee are unanimous in favor of steam. There are, it is true, many and strong arguments that can be urged in favor of horse-power, and if the question was yet open—not decided by experience, the great anxiety expressed by those immediately along this improvement, to exclude steam, would meet with a more favorable reception.—But the question is decided, and correctly, in favor of steam. Experience shows that it is cheaper by one-third, and more expeditious than animal power. This is shown, as well in Europe as in our own country. In proof of which, the Liverpool and Manchester—the Stockton and Darlington rail roads in England; the Baltimore and Ohio—the Baltimore and Susquehanna in Maryland; the Petersburg and Roanoke in Virginia; the Charleston and Hamburg in South Carolina; the Newcastle and Frenchtown in Delaware; the Camden and Amboy in New Jersey; the Hudson and Mohawk—the Schenectady and Saratoga in New York, and the Philadelphia, Germantown and Norristown, in Pennsylvania, are adduced. Other railways might be added, but these are sufficient. Indeed, experience fully demonstrates that steam can be used to the best advantage on roads much shorter than those constructed by the state.

It is worthy of consideration, that the Philadelphia and Columbia, and the Portage rail roads, were not constructed merely for the use and benefit of the counties through which they pass. They were intended, and are a part of the great chain of our improvements connecting the waters of the east with those of the west, thereby increasing the manufacturing, commercial and agricultural facilities of the whole State. The opinion that steam should be the power, is confirmed and strengthened by an able report made by Mr. Keating to the Legislature, upon the 14th of March last. In that report the subject is well discussed, and a decision made in favor of steam power.

Those who live along our rail roads, object to the use of steam from the fear of their improvements being burnt by fire thrown from the engines. This apprehension, it is believed, will be entirely removed by the use of coke, or mineral substances, in generating steam. If it should and that it will is not doubted, it is confidently expected that the whole state will be satis-

fied that the power should be mechanical and not animal.

The next question is, who should own the motive power—the state, a company or individuals?

Upon this point, the undersigned entirely dissent from the report of the majority. They (the majority) think the state should own the motive power—we, that she should not. Some of the reasons that have influenced us in coming to this conclusion, will be here given. Let it first be remarked that this is an open question. As yet it has not been decided. It is true, by an act of Assembly, passed the 15th of April last, the Canal Commissioners were authorized to purchase and put on the road locomotives, but that act was passed, not that the state should continue to own the motive power, but that the road should be stocked as soon as possible. A report against the state owning the motive power, was made by Mr. Keating on the 14th of March, 1834. There was not time from that to the close of the season, to make proper provisions for stocking the road, and therefore, the act of the 15th of April, 1834, was passed. It is repeated then, notwithstanding that act, the question is now open. It is necessary that it should be settled, and that as soon as possible.

Then, should the state own the motive power? It is the nature of power, whether found in an individual, an incorporated company, or a government, to extend, instead of contract its rights or privileges. This is daily exemplified, and whenever it is, it should be promptly met and counteracted. It cannot be so met by allowing the state to put herself in the way of individual enterprise. It cannot be counteracted by allowing the state to embark in what can be accomplished by her citizens. Whatever individuals are equal to, as a general rule, should be entrusted to them and to them alone. This is so congenial, both to our feelings and the principles of our government, that arguments are unnecessary to satisfy us of its truth. If we allow the state to embark in one enterprise that can be accomplished by her citizens, where shall we stop? Will we allow her to run into every thing that can be driven to advantage? If the general government was not in the way, would we allow the state alone to export and import, because it may be profitable? Or, would it be policy that she should own all our improvements made by companies, and all our banking institutions, because they may yield a revenue? Or, should we go farther and allow her exclusive manufacturing privileges, because thereby she might soon be relieved from debt? Or should we go farther yet, and like some governments of old, own all the lands within our charter, and farm them out, because it might be to our advantage? The undersigned are fully of opinion, that the state should not embark in an enterprise like this, to which individuals are fully equal.

It is proper now, in the present state of our finances, that the rail ways should be stocked, if possible, without drawing from the treasury. This should have great weight, for we have no funds now to experiment with; it becomes us to turn every dollar to the best advantage. If, however, an opinion was entertained that these roads could not be stocked otherwise than by the state, the expense should have no weight, for they have been completed in a costly and permanent manner, and must be stocked, cost what it will. Satisfied that individuals, associations, or companies, are equal to this undertaking, the undersigned are anxious to save the state the expense and labor necessary in placing and keeping the power upon these roads. It is only necessary to look around us to be satisfied that individuals are equal to this. They export and import; they conduct our manufacturing and commercial interests; they have constructed extensive improvements, both rail roads and canals, within this state. Individuals, for the general government, carry the mail. At an incalculable expense, by steamboats, they transport every thing upon our rivers and inland seas. Wherever

we look, we see that the policy of this government, never to interfere with the industry of the people, is fully carried out.

It is a well established principle of our nature, as also engrafted in our religion, that where our interest is our hearts will be. Wherever we find most individual interest, there too we discover the greatest industry and economy, and the least disposition to experiment. In proportion as individual interest is removed, industry and economy retire. Business is better attended to by the principal than by an agent. The agent of an individual is more faithful than of an association or company. In proportion as the association or company increases in wealth and numbers, as a general rule, industry, economy, and faithfulness in the agent diminish. When a government is principal, strict economy and faithfulness in the agent is seldom found. It costs an association or company more to perform a given piece of work, than it does an individual, and it costs a government more yet. This is susceptible of proof in innumerable instances. Our canals and rail roads are proof in point, if proof is necessary. It cost the Schuylkill Navigation Company, an improvement one hundred and ten miles long, for repairs, salaries to officers, lock-keepers, wages, &c. for the year 1834, only \$68,110 60. If we judge from our improvements, it would have cost the state a much larger sum, and the general government a sum yet larger. In conclusion, on this point, the undersigned would add that the Little Schuylkill Rail Road Company, satisfied that where there is the most individual interest, there will be the strictest economy and greatest faithfulness, have issued proposals for contracts to carry coal from the termination of their road to the city of Philadelphia.

If then, individuals or associations can place and keep the motive power upon our roads, and that cheaper than the state, why should she undertake it? A satisfactory answer has not presented itself to the undersigned. It is said, in the report of the majority, that the state wants no profit, and that individuals must have a profit, for the motive power. This appears a fallacious argument. The state intends to charge sufficient to keep up the power and no more. The power cannot be maintained without salaried officers. This pay forms part of the expense of the motive power; and the state always pays more liberally than individuals. If individuals own the power, the pay of the salaried officers and attendants will be reduced, and consequently, the expense of the power. If individuals own the power, the profits arising from transportation, will necessarily, when there is competition, reduce, if not entirely take off, the cost of the motive power. This, with the State, cannot be effected, because she derives no profits from transporting.

But admitting that the state could place and keep the power upon the road as cheap, or even cheaper than individuals or associations, still the undersigned would be of opinion that she should not. Whoever owns the power, should either own the cars attached, or be responsible for all damages sustained. For the state to own the cars and be a common carrier, would be too palpable an interference with the industry of the country. For the state to pay all damages, might either consume the whole revenue, or keep her harassed by vexatious law-suits. The idea of the state becoming an insurer or carrier, is therefore, dismissed, and on its dismissal is based an argument against the state owning the power: For if the owner of the power owns the cars, or is responsible for damages, most certainly, a greater degree of produce, of skill, and faithfulness, will be brought into requisition, than would be if he did not own the cars, or was not responsible for damages.

Another argument against the state owning the power, is the indirect increase thereby of the patronage of the Governor, already too great. If the state owns the power she must act by agents appointed indirectly by the Governor. The tenure of their office depending

upon executive pleasure, fealty, if we judge from the past, will become an incident. By such an increase of patronage the arm of an administration may be strengthened to the injury of this government. There is another view no less forcible; every successive change of the executive effected by the people, will be accompanied with a corresponding change in these agencies, the competent, skilled and faithful being removed, with the stupid and faithless; such will not be the case, if individuals or associations own the power. Then we will have assurances based upon individual interests, that the tried and faithful will be retained; In addition it might be urged, for it is an undoubted truth, that a more strict accountability of agents is required by individuals and associations than by the state. The further the active agent is removed from those particularly interested, the greater will be his compensation and the greater his imposition too.

Again the State should not own the power, because if owned by individuals or associations, the transportation and consequently the tolls upon these roads, will be increased. This is susceptible of entire demonstration. Man works influenced by some motive. When the acquisition of property is the object, interest is always that motive. It is our nature to desire the accumulation of property. If then individuals own the power, it becomes their immediate interest to have it always in order—to keep trustworthy agents—to have the greatest number of cars possible attached to the power—to run the length of the road in the shortest time that it can be done with safety and at the least possible expense.

If the State owns the power, it will add to the case of the "salaried officer" and take nothing from his wages, if he should not consult alone the interest of the State. If individuals own the power, competition will be introduced, and the charge for attaching to the power will be reduced to the lowest possible point.

Allow the State alone this privilege and the charge stands a greater chance of being increased than diminished. Give this privilege either to an individual, a company or the State and the result will be the same. In proof of which, in addition to what has been said in this report, this fact is stated: the charge by the state, for power upon our rail ways is one cent per ton per mile. The charge for the same upon the Baltimore and Ohio rail road, is about a half cent per ton per mile. Upon the Baltimore and Ohio road, fuel costs about six dollars per ton, whilst upon ours it can be obtained for less than four. Upon our roads the state owns the power, whilst upon the other it is owned by the company. If competition was allowed upon our roads, their being then more individual interest, this charge would be reduced, and by its reduction the cost of transportation would be cheapened and business increased.

The business would be increased for another reason—wherever there is fair competition there is always a greater disposition to accommodate. If individuals owned the power, a greater regard for the cars attached would be secured, because thereby their business and their profits would accumulate. By attention—by care and a disposition to accommodate, kept active by competition, the tolls must increase. But in addition to greater faithfulness upon the road, may be added, and it is no small item, the amount of business that by the influence of the owners of the power united with the owners of the cars and of the friends of each, will be thrown upon these improvements. This last consideration is worthy of much weight, for it becomes the State to interest directly in her improvements the greatest possible number of her citizens.

It is important, in the opinion of the undersigned, that the motive power placed upon all the connecting links of the great chain of our improvement, should be furnished by the same agency. It is also important that this power should either all or none of it be owned

by the State. It is not intended by this that the State should not own and keep up the stationary engines—that the State must do. But it is believed to be bad policy for the State to own the power upon part of the road, and the balance to be rented or sold to individuals. That some of the levels upon the Portage rail way should be sold or rented, whilst the State should own the power upon the balance, is advanced in the report of the majority; from that opinion the undersigned entirely dissent. Apart from the stationary engines, they think the State should own none of the power. If the State owns the power, she must, at a great expense, purchase and keep horses sufficient to stock the short levels upon the Portage rail way and either end of the Philadelphia and Columbia road. But the report of the majority maintains that the State should own the steam power, and that the levels accommodated to animal power should either be sold or rented. The selling or renting these levels cannot be effected without manifest injury to the whole road, as also to our canals.

No man can form any thing like an accurate opinion of the amount that will be transported upon these roads, the present year. And if an accurate opinion cannot be formed, the levels can be neither sold nor rented profitably. If they should be disposed of, what sufficient guarantee can be given, if the lease should not be profitable, that it would not be abandoned. Those who can give security, will not embark in an enterprise as small as the stocking one level upon the Portage rail way. Abandoning a level for any period, however short, must necessarily be attended with bad consequences. It will retard transportation, affect the credit of the road, increase expenses, and diminish the receipt of tolls. These short levels, the undersigned are of opinion, can be neither stocked by the state, sold, nor rented profitably. And if they cannot, as we must systematize the manner of transporting upon our road, the idea of the state owning the power should be abandoned.

In addition to what has been said, as to the ability of individuals to furnish the motive power, it may here be stated, that they are rapidly stocking our canals, at an expense far beyond what will be required to procure engines adapted to our rail roads. And as these roads are connected with our canals, the associations formed upon them, will immediately be extended to the roads. Open the roads to competition, and associations will be formed, as upon our canals, of wide influence and extended wealth.

In the opinion that the State should not own the power, the undersigned are confirmed, and strengthened by the report of Mr. Keating, on this subject, made in March last. In that report it is said, "the policy (of the State owning the power) is more plausible than substantially good." Again that report says, "individuals working on their own account, under a strict supervision are obliged to pay more attention to it than could be obtained from salaried officers. The difficulty of the selection of proper officers, the dangers from the increase of patronage the want of a balancing or checking power to prevent injustice, are among a few of the evils incident to the conferring this duty upon salaried officers. For such men there would be no motive (exclusive of a sense of duty,) to produce an increase of travel on the road; since the more frequently it is used, the greater would be their duties, without any additional compensation."

"With a contractor the case would be different—to him the increased travel or transportation would be a source of increased gain. It would be his duty to procure assistance on the best terms and of the best kind." Thus confirmed in the opinion, that the State should not own the motive power, the undersigned conclude by submitting the following bill as the result of their investigation.

JOHN H. WALKER,  
E. F. PENNYPACKER.

*Be it enacted by the Senate and House of Representatives, &c.* That from and after the passage of this act, the Philadelphia and Columbia railway, and the Allegheny Portage rail-way, be and the same are hereby declared and made public highways, and shall be used as such for the conveyance of passengers and the general purposes of transportation, as hereinafter directed.

Section 2. Any individual, or association of individuals, may, after the passage of this act, have full privilege to place cars upon the aforesaid rail ways, and transport them by the use of locomotive engines, excepting the section between the eastern inclined plane and the city of Philadelphia, and the short levels upon the Allegheny Portage rail ways, upon which section and levels so excepted animal power may be used; and further, any individual or association of individuals may, during the season the navigation of the canals is obstructed, have full privilege to place cars upon the aforesaid rail ways, and transport them by the use of animal power: Provided always, Those persons that use the road for the purposes aforesaid, shall use no other fuel for the purpose of generating steam, than coke or mineral coal, and shall be governed by such regulations and rules as the canal commissioners may direct and consider advisable to protect the improvements, and systematize the operations of the transporters.

Section 3. The Canal Commissioners be and they are hereby directed to have the said rail ways finished, water stations, &c. erected so as to be adapted to transportation by locomotive engines.

Section 4. The Canal Commissioners be and they are hereby directed to dispose of and sell to any individual or association of individuals, all the engines (except the stationary ones) ordered by the act of the fifteenth of April, one thousand eight hundred and thirty four—and furnish no more power hereafter for the purpose of transportation: and further, the Canal Commissioners be and they are hereby directed to take charge of all stationary engines, machinery connected therewith, and water stations, and keep them in repair, and cause a strict superintendence of the transit of all travel and commerce upon all the planes overcome by stationary engines.

#### LETTER TO THE EDITOR.

JOHNSTOWN, NOV. 22, 1834.

Dear Sir—I observe, by your paper, of the 18th inst. that you have been referring back to the first volume of the Pittsburgh Gazette, of the year 1787.—I was a subscriber to that paper in the year 1797 and 1798.—In one of those years, I think it was, that I had a communication published in that paper, on the subject of a railway from Philadelphia to Pittsburgh.—I kept no copy of it, nor do I now know what it was like; but it would no doubt, be somewhat of a curiosity at this day. I would thank you sincerely to hunt it up and republish it in your valuable paper, to which I am now again a subscriber, and much obliged

Your obedient servant,  
A. MORRISON.

We have just received the above letter.—We have not got a file of the Gazette for 1798, but will look over that of 1797; and, if we find the communication of Mr. Morrison, will republish it—it will, indeed, be a curiosity.—*Pitts. Gaz.*

#### INTERESTING RELIC.

We had the gratification recently of examining the original deed from "Dame Eliz. Carteret" and the executors of Sir George Carteret, to William Penn and his eleven associates for the whole of East Jersey. This instrument is beautifully executed on two large sheets of parchment, the head line being illuminated or embellished in the finest style of the ancient scribes. The consideration money named is 3,400 pounds sterling, and the deed is dated London, Feb. 2d, 1681. The Grantees are William Penn, Rob. West, Thomas Rud-

yard, Samuel Groom, Thomas Hart, Richard Mew, Thomas Wilcox, Ambrose Rigg, John Haywood, Hugh Hartsorne, Clement Plumstead, and Thomas Cooper.

This deed was recently found with other interesting documents, among the papers of one of these original proprietors, in the possession of his descendants, in the interior of Pennsylvania. It is now in the hands of a gentleman of the bar of this State, to whom it was sent, with other papers, to aid him in the management of a suit in chancery. It would be well if the instrument could be procured by the State, and preserved.—*Newark Advertiser.*

#### MORE CHESTER COUNTY BEEF.

On Saturday last 10 head of cattle were brought to the borough and weighed upon the hay scales. Their weights are given below.

William Mitchener,	1,860
Do	1,725
Thomas Hickman,	1,950
Do.	1,770
Marshall Hickman,	1,820
Do.	1,820
Samuel Worth,	1,780
Do.	1,770
Benjamin Kerns,	1,805
Do.	1,700

For the Gazette and Intelligencer.

*Messrs Editors*,—Until within a few weeks it might have been said that there was a post and rail fence in Chestnut street, Philadelphia. Finding that you and other elderly gentlemen take delight in urbane reminiscences, I have often determined to keep that fact in recollection for my grand children, who may perhaps be great folks, and scorn the people who live so low as Broad street. The fence was at the South East corner of Schuylkill third and Chestnut, and has just been removed, in preparation, I suppose, for building. Is there another within the limits of the city?

TRIGINTARIAN.

Eight flat boats have been loaded with ice at Franklin, Pa. destined for Natchez and other ports far down on the Mississippi, where it is said to be worth 50 dollars per ton.

The Franklin Intelligencer, from which we learn the above fact, says—"The boats are lined inside with boards, and filled in with coal dust between the lining and outside plank in order to keep out the heat. The ice is then cut with whip saws, in pieces about 22 inches square, and carefully stowed in the boat, after which it is covered with a thick bed of straw."

From the U. S. Gazette.

#### THE WEATHER.

Our prediction seems to have come true, that the cold weather had not taken his final leave of us for this winter, but that it would return early in February. During his absence from the 12th of January to the 1st of February, the weather was exceedingly mild and pleasant. Some times, during the middle of the day, the Mercury would rise to sixty, but would descend in the night to various points; some nights to only forty, and others thirty; just cool enough to prevent vegetation. Friday, January 30, was a violent rain storm, with considerable thunder and lightning in the evening; after which it cleared, and became colder. On Sunday morning, February 1st, the Mercury in old Fahrenheit stood at 30. On Monday, February 2d, it stood at 22. On Tuesday morning, at 18, i. e. above 0. but 14 below the freezing point.

The Delaware is now interrupted with ice.—Yesterday morning commenced a snow storm which has covered our streets and roofs.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.--NO. 7.

PHILADELPHIA, FEBRUARY 14, 1835.

No. 371.

## RIVER DELAWARE.

Report of the Committee to whom were referred the Message of the Governor, and Documents, relative to the River Delaware—Mr. Read, of the City, Chairman. Read in the House of Representatives, Jan. 27, 1835.

The Committee to which were referred the Message of the Governor of the 12th December, 1834, and the accompanying Documents, relative to the use of the waters of the River Delaware,

### REPORT—

That they have bestowed on the subject referred to them, the attentive and deliberate consideration which its importance and the interests involved in it seemed to require, and have sought from such sources as were accessible to them, all the information that could be obtained. They have been rendered the more anxious to proceed with caution and accurate information on every point to which their attention has been directed by the inadequate statement of the circumstances on the face of the documents referred to them, and by the absence of any narrative of the different stages of the negotiation, the result of which only is now submitted for the approval of the Legislature. The committee having reluctantly arrived at a conclusion adverse to the proposed ratification, do not agree with the Commissioners in the opinion that "it was useless to detail all the proceedings of the joint commissioners which led to the final result," and could have wished that the documentary evidence communicated to the Legislature, had been more complete. The history of the progress of the negotiation might have had a tendency to remove the doubts and difficulties which have existed in the minds of the committee. To know what was asked and refused, might, in many respects, as matter of illustration merely, be as useful as to know what was granted, and it would have been the source of sincere gratification to the committee, had they been apprised of the precise difficulties which they presume must have prevented the more satisfactory adjustment of this business. The committee regret too, that all the materials, comprising drafts with soundings, and the result of personal and scientific observation, on which the commissioners acted, were not communicated. It is impossible to believe that the very inadequate materials referred to the committee were all that the commissioners had before them during their deliberations. They are manifestly insufficient for the safe and prudent decision of a question so vitally important to a large portion of the citizens of the Commonwealth. A small draft of the proposed dam and sluice at Wells' Falls, was the only paper of the kind referred to the committee, or so far as they are apprised, communicated to the Legislature. Some time subsequent to the organization of the committee, on a personal inquiry made by the chairman, a series of drafts of different portions of the river was found in the office of the Secretary of the Commonwealth, which they have been left to conjecture, was the same prepared by Mr. Kneass, the former engineer, and referred to in the report of the commissioners. They are not, however, authenticated in any way.

In examining the report and documents annexed, the committee have been painfully struck with the apparent precipitancy with which the proceedings of the commissioners have been marked, and which, in the absence of any statement of the mode by which this compromise was decided on, cannot but be regarded as not altogether consistent with the prudent and circumspect deliberation which the subject deserved. A comparison of dates will illustrate the meaning of the committee. The letter of instructions to Mr. Gay, the engineer, is dated at Lancaster, October 11th, 1834.—Mr. Gay's report to the commissioners, made after an examination of the river at the different points, is dated at Lancaster, October 27th, 1834. It must be borne in mind, that it is on the basis of this report of Mr. Gay, that the agreement was concluded. The report of Mr. Douglass, the engineer employed by the New Jersey commissioners, is dated at Princeton, November 18th, 1834, and the final agreement now submitted for confirmation, was executed at Philadelphia, on the 22d of November. It is but just however, to the engineers, to state, that in their reports there is an expression of regret at the limited time allowed for examination, and whence the necessity of this haste, the committee are wholly at a loss to imagine. Mr. Kneass's report, made April, 1834, is the only one which appears to have been made after a minute and deliberate examination, and it is adverse to the arrangement agreed upon by the commissioners.

Dismissing these preliminary considerations, which the committee refer to, not as essential to a just understanding of the views they shall have occasion to present, but as illustrating and enforcing the necessity of great caution in a final decision of the question, they will proceed to examine the merits of the agreement itself, with reference only to the constitutional rights and interests of all parties affected by it.

A grave question of a constitutional right, presented itself for the consideration of the committee in the outset of their deliberations, which is not referred to in the report of the commissioners. The committee are bound to believe, that the familiar principle of constitutional law to which they refer, could not have escaped the attention of the commissioners, and therefore, they the more regret that there is no allusion to the mode of solving the difficulty which it involves.—By the 10th section of the constitution of the United States, it is provided that "no state shall, without the consent of Congress, lay any duty or tonnage, keep troops or ships of war in time of peace, enter into any agreement or compact with another state," &c. The committee do not mean to intimate it as their opinion, though such might be the strict interpretation of the constitutional prohibition, that the consent of Congress is a necessary preliminary to a negotiation between two or more states, but they are entirely at a loss to imagine by what interpretation of explicit language, the necessity of a subsequent ratification can be obviated, or how, without the consent of Congress, in the language of the 5th article of this agreement, it can be considered "as a joint compact between the said states and the citizens thereof respectively, whenever the legislatures of the said states shall have passed laws approving of and ratifying the same, and there after for-

ever irrevocable by either of the said contracting parties without the concurrence of the other." Whether an "agreement or compact," thus made and ratified without reference to the constitutional supremacy of Congress, would be void *ab initio*, or only voidable, is a question the committee do not pretend here to determine, but it is clear to their minds that such a submission to the Federal Legislature is requisite, and they would deem it wholly irregular to recommend the ratification of a compact in terms framed in disregard of it. The committee do not believe it would be a valid, still less an irrevocable compact, under our National charter, when ratified by the two states without the sanction of Congress. The necessity of such sanction should, the committee think, have been recognized on the face of the compact.

Perhaps no case could occur to which the reason of the constitutional provision would more forcibly apply than that of a compact between the two states having such an object in view as is contemplated by the agreement now under consideration. It is not the design of the committee in this place to anticipate their practical objections to the proposed dam at Wells' Falls. It is sufficient to state here that it is doubtful whether or not such a dam as is proposed will be an obstruction to the navigation of the Delaware. In its decision as a doubtful question, not only have the citizens of the Union at large an interest, which may be presumed to be the legitimate object of the provision of the article of the Federal Constitution, and which would be completely protected by the supervising power of Congress, but the citizens of a neighboring State within whose territory the river Delaware has its source, have, in the opinion of the committee, vested rights in its navigation existing long prior to the formation of the constitution of the Union—the acquisition of no compact, the result of no concession, but rights which the general law of independent sovereignties gave them, and of which confederacy and union have not deprived them. These rights, in the opinion of the committee, no ex parte negotiation can impair. If, as cannot be denied, the citizens of New York have by the law of nations an interest in the unobstructed navigation of the Delaware, the rights which that interest gives them so far from being divested by the constitution of the Union, are necessarily and vastly strengthened by it.

In considering the rights of New York, as thus affected, it must further be borne in mind that should the present compact be ratified, such are its provisions, that it will be of the acts of Pennsylvania alone, as sanctioned by this compact, that New York can have reason to complain. The only advantage directly secured to New Jersey is the permission (which by the way she has already assumed in palpable violation of the agreement of 1783,) to use a certain portion of the water of the Delaware to feed the Delaware and Raritan canal. This abstraction of water it is supposed will never injuriously affect the navigation.—Probably if strictly confined to canal purposes it will not. But on the other hand, in order to feed her canal, Pennsylvania is to build a dam across the river, which may or may not, as time will show, prove an obstruction to the navigation. If any thing done under this agreement should prove an obstruction, it must be the Pennsylvania feeder dam, and in that event a collision between the two States of Pennsylvania and New York would ensue, far more unpleasant than the controversy which is to be adjusted by this compact, because founded in a palpable infraction of right, while New Jersey, secure in the enjoyment of its apparent innocent privilege, may easily afford to be the indifferent observer of the dispute.

The committee have been content with stating rather than illustrating these points. Had their views of the practical results of this negotiation been different, these constitutional difficulties would have been regarded as more interesting. These suggestions now are made

by the committee at once with diffidence, and with an honest conviction that they are worthy of consideration hereafter. As now presented, they have been regarded rather as matter of form than substance.

The committee will proceed to examine the compact on its merits.

The compact as made by the commissioners, contains the following provisions:

First. It is declared that the State of New Jersey may take, or cause to be taken, from the Delaware river, by means of the feeder at the head of Bull's Island, as much water as may be necessary to supply the Delaware and Raritan canal for the purposes of navigation.

Second. It is declared that the State of Pennsylvania may take, or cause to be taken from the Delaware river, by means of dams and feeders at Wells' Falls, as much water as may be necessary to supply the Delaware division of the Pennsylvania canal, as far as the city of Philadelphia, should the canal be so far extended, for the purposes of navigation. The height of the dam to be constructed by the State of Pennsylvania at Wells' Falls, shall not exceed three feet above the surface of low water mark at the head of the Falls. There shall be a sluice in the dam sixty feet wide, and at least three hundred feet long, or longer if necessary, to make a secure descending navigation. The walls of the sluice as well as the dam shall be made of substantial timber crib work, filled with stones, and the upper end of the sluice walls extending in the dam shall be made sufficiently high to afford an index to watermen of the channel prepared for them. Boats or other craft ascending the river shall be admitted into the Pennsylvania canal, by locks constructed at or near the mouth of Neely's creek; and the said boats or other craft ascending the river, shall be let out into the river by a guard lock or lift locks at the head of the Falls, free of expense. The locks shall be of sufficient capacity to admit all boats or other craft which can navigate the Pennsylvania canal. A good and sufficient channel shall be kept open above the dam of sufficient depth at low water to float said ascending boats or other craft which may pass from the said canal, to a corresponding depth of water in the river, and above the suction of the said sluice, and such a tow path as may be necessary for this purpose shall be constructed.—Such locks, channel and tow path, shall at all times be kept in good repair by the State of Pennsylvania.

Third. The State of New Jersey shall cause the obstructions to the navigation of the river Delaware, at Scudder's Falls, which have been placed there by the Trenton Delaware Falls company, to be removed or otherwise obviated.

The advantages which by this agreement in the view of the commissioners to be secured to Pennsylvania are:

1st. The supply of water to the level of the Delaware division of the Pennsylvania canal below New Hope.

2d. Increased facilities to the coal trade by a communication at New Hope, with the Delaware and Raritan canal leading to the New York market.

3d. The removal of the existing obstructions in the Delaware, at Scudder's Falls, illegally placed there by the Delaware Falls company.

4th. The improvement of the rafting channel and of the ascending navigation; and

5th. The adjustment of an ancient and irritating conflict of rights and interests of the two states.

The committee will endeavor to examine these proposed advantages briefly, and in the order they have been stated.

First then as to the supply of the lower level of the canal with water. From the commencement to the close of their inquiries, the committee, though deeply impressed with the importance of this subject, have been so embarrassed by the various and contradictory

statements of facts submitted to them, as almost to abandon all hope of arriving at a satisfactory result. On the one hand, they have been assured that the deficiency of water below New Hope has been ever since the construction of the canal most prejudicial to the public interest. On the other, they have been referred to the significant fact, that during the past season of unparalleled drought, the navigation in this level was never once interrupted by want of water. The sufficiency of the present temporary works at New Hope, was emphatically asserted on one side and emphatically denied on the other. Again the cost of excavating the level so as to require no dam, is variously stated from \$60,000 to \$170,000, and the loss to the commonwealth from the interruption of the trade during the progress of the work palliated or exaggerated according to the interested views of the parties. To have rejected all information except such as was derived from official sources would not in the opinion of the committee have been proper, and they have therefore preferred encountering the additional labor and perplexity incident to the solution of these apparent contradictions. To one result there was little difficulty in arriving, viz: that without the temporary works at New Hope, there would be a deficiency of water in the lower level. The committee did not feel it to be part of their duty to inquire into all the modes of supplying the canal with water, but it having been suggested as an inducement to the confirmation of this compact that it would, even if the dam were deemed inexpedient, legalise the existing works at New Hope; they are compelled to say a few words in relation to those works. If they interfere in the slightest degree with the navigation of the river, they are clearly a violation of the rights of New Jersey, and as such indefensible, but it must be borne in mind that New Jersey is at this moment in quiet possession of a portion of the waters of the Delaware, abstracted illegally through the feeder of the Delaware and Raritan canal. Though the committee are far from intimating it as their opinion, that this is an adequate apology; yet in estimating the emergencies of the case in its various bearings, they have been struck with manifest want of equity in any complaint on the part of New Jersey. They see no propriety in attempting to legalise these works by what seems to them a forced construction of the papers submitted. Whatever interpretation might be put on the compact itself as to the obligation on Pennsylvania to make the dam across the river, the committee do not doubt on a careful examination of the compact together with the report to the Governor, that it was the meaning of the joint commission that Pennsylvania was to be bound to build the dam, and that the building of the dam at the expense of Pennsylvania, was part of the consideration of the agreement.

The committee have arrived at two results, then, viz: that by the present works, however illegally constructed, the level below New Hope is adequately supplied with water, and that a confirmation of the compact, without the construction of the dam across the river, would be entirely useless, and would render these works more legal than they are at present.

But another fact has been established in the opinion of the committee, viz: that there has been, and in case of an increase of the trade, will certainly be a deficiency of water in the level above New Hope, for which the present compact provides no remedy. The tenor of Mr. Kness' report is decidedly confirmatory of the actual existence of such a want of water above New Hope; and though Mr. Gay, in his report, expresses a very decided opinion that the Lehigh has and always will supply the canal from Easton to New Hope, yet he as distinctly states it as his opinion, that the time may come when a more active trade than that of the past season will show the propriety of introducing a feeder to the canal, at some point on the Delaware, above New Hope.

If, then, there is a strong probability, to use the most guarded language that an additional supply from some point above New Hope, will, before long, be necessary, the committee cannot imagine any conceivable inducement to ratify a compact, which will preclude Pennsylvania from ever obtaining it in the only way it can be obtained. The compact renders legal the abstraction of water by the Delaware and Raritan feeder. It permits Pennsylvania to feed her canal by dams and feeders, of prescribed dimensions, at *Wells' Falls*, and it does no more. If, then, by treaty, we have obtained the consent of New Jersey to obtain a supply of water from a specified point, it follows that we cannot take it without another treaty, from any other point. A different doctrine would lead to a result which the committee are sure the commissioners never for an instant contemplated. Apply any other than a strict construction to this compact, and to what injurious and unforeseen consequences will it not lead? In the report to the legislature the commissioners say that they intended to secure to each state as much, and *only as much* water, as is necessary to supply its canal for navigable purposes. In the compact the restrictive word is no doubt inadvertently omitted, and New Jersey is permitted to take from the river as much water as may be necessary to supply the Delaware and Raritan canal, for the purposes of navigation. The committee do not mean to say that the limitation is insufficient as it stands: on the contrary, they believe it is. And if it is, then in their opinion, the specification of the point whence Pennsylvania may feed her canals, viz: *Wells' Falls*, is equally conclusive of her right to feed them by dams and feeders, at any other point. A rule is a bad one that does not work alike on all. If the compact is confirmed, and a want of water should hereafter occur above New Hope, and Pennsylvania can supply it by another feeder, without the assent of New Jersey, because such another feeder is not prohibited in terms, then, by precise parity of reasoning, the Delaware and Raritan company have the power to use the water in their feeder for manufacturing purposes, because it is not prohibited. To show, incidentally, to what practical risk this latitude of interpretation, followed out to its legitimate results, would lead, the committee will refer to a single passage in Mr. Buchanan's letter of the 17th October, and Mr. Gay's answer: "There is good reason to believe," says the former, "that within the last few weeks the Delaware and Raritan canal company have caused their feeder, at Bull's Island, to be deepened a foot, or more. If this be true, what will be the effect upon the navigation of the river?" Mr. Gay says, in reply: "On a visit to the point in question, it appeared that the works contemplated by the company, at the entrance of the feeder, were incomplete. The arrangement, however, is one which is calculated to place at the command of the company a large portion of the river during its lowest stages; and should the water be drawn through the feeder, for any other than navigable purposes, it would, in all probability, tend to injure the natural navigation of the river during low water."

All other objections aside, the one that has been just suggested would alone be sufficient, and the committee would do violence to their own deliberate convictions, were they to recommend the ratification of a compact which would either prohibit any future relief for what the committee believe is an imminent danger viz: the want of water above New Hope, or would place the common property of the citizens of the Union, the flow of a noble river, at the mercy of a single State, and subservient to a local interest.

In reference to this matter of supplying the canal, even below New Hope, the committee have but a single word to add. Not only, according to the view that has been taken of this compact, is the place at which the dam is to be erected strictly specified, but its dimensions prescribed. It is not to exceed three feet in

height above the surface of low water at the foot of the falls. This height is taken as a medium between the estimates of the two engineers. Mr. Gay thinks a two foot dam at Wells' would supply the canal. Mr. Douglass, the New Jersey engineer, says expressly, that he does not think Pennsylvania can get a sufficient supply of water with a dam of less height than three feet and seventy-five hundredths, (3.75.) The commissioners, for reasons which have not been communicated, split the difference, and fixed it at three feet—Now, let it be supposed for a moment, in the event of what the commissioners contemplated throughout, the extension of the canal from Bristol to Philadelphia, a three feet dam should prove inadequate to supply the whole distance, or in other words, that Mr. Douglass' estimate should prove to be correct, by what authority could Pennsylvania raise the dam one inch above the three feet which New Jersey has allowed her? Certainly none, except what might be derived from new negotiations, and new concessions. Whatever is settled by compact, can only be altered by compact, and separate legislation must necessarily be ineffectual. If, as we have said, it is supposed, and in the conflict of scientific opinion this is not unreasonable, Mr. Douglass should prove to be right, and Mr. Gay and the commissioners wrong, in what a situation would our irrevocable compact place us. The dam would avail only as a pernicious memorial of inconsiderate negotiation, and Pennsylvania would at last be reduced to the attitude of a suppliant to her sister State, for the privilege of completing her own public works.

Viewing this matter in every aspect in which it has been presented to them, the committee are of opinion that, as a means of adequately supplying the canal under existing and probable circumstances, the proposed arrangement is inexpedient and inadmissible. Were the committee called on to express an opinion as to the best mode of feeding the canal, they have no hesitation in saying, that, whether as respects the certainty of supply for all possible deficiency, either above or below New Hope, or the absence of any impediment to the navigation of the river, a wing-dam at Cutbush's Island, as is recommended by Mr. Kneass and approved by the commissioners, is beyond all question preferable to any other that has been suggested. The commissioners having stated in their report that they should have recommended a dam and feeder at Cutbush's Island, as the best mode of supplying our canal, but for their sense of the necessity of a connection between the two canals; for the benefit of the coal business, &c. the committee are brought to the consideration of that point.

2. The committee do not propose to dwell at length on this point, believing that the views they have already stated in regard to the palpable inefficiency of the proposed arrangement, will be sufficient to justify the result to which they have arrived. The argument of the commissioners is, that assuming a connection for the benefit of the coal trade is desirable and will be made, it will be better at New Hope than higher up; because the boats will be thus obliged to remain longer in the Pennsylvania canal, and a larger amount of tolls be collected. The difference of tolls between Black's Eddy and New Hope is estimated, according to the report, at \$16,000 a year, and of course increasing. It is supposed that this amount will be saved, by making the junction at New Hope rather than higher up. The committee do not mean here to discuss the question as to the general expediency of an out-let from the Pennsylvania canal, so as to communicate with the New York market. If such a measure is to be adopted, it seems to the committee to be the appropriate subject of distinct consideration, and that it should not be blended with disputed questions respecting the eligibility of various feeders to canals. The inhabitants on the line of the canal below New Hope, would, the committee are assured, regret the construction of an out-let

above; and we are not prepared to say their wishes and interests should be lost sight of. Every thing being equal, the committee would prefer that none should be made. This, however, is a subject for distinct consideration hereafter. It can then be decided on its own merits, and regulated by precise limitations. That Wells' Falls is not the best place for an out-let, seems to be conceded, as there are other points where the depth of water is sufficient to float boats across without a dam. That it is not an eligible place for a feeder, has been shown. Cutbush Island is believed to be best for the one, and Black's Eddy, on account of the depth of the water, is represented as best for the other. As to the tolls, in case an out let higher up should be determined on, about which the committee express no opinion, the difficulty admits of an easy solution. An out-let at Black's Eddy, or wherever the depth of water will justify it without a dam, will be of advantage necessarily to the coal trade, by opening an avenue to the New York market, and to the Delaware and Raritan canal company, by increasing its tolls. The committee believe that the additional toll now collected between Black's Eddy, for instance, and New Hope, would be cheerfully paid, for the privilege of an out-let lock.—The committee do not mean to say that such an out-let or connection should be made—that is a question to be decided hereafter on its own merits—but they do mean to say, that assuming, as the commissioners do, that it is desirable, the difference of tolls between a higher and lower point, if in other respects the former be preferable, would be cheerfully paid by the parties interested in it. If this suggestion of a saving of tolls has no force, and both a better feeder and a better out-let can be found elsewhere, the committee are at a loss to find any other inducements on the points referred to, to confirm the compact. As to the connection between the canals, the committee would observe, in conclusion, it is so manifestly the interest of the State of New Jersey (having as she has, so strong a pecuniary sympathy with the Delaware and Raritan Canal Company) that it should be made with a view to the increase of its tolls, that they have no fear but that when the proper time comes, a suitable junction can be made and on cheaper terms than are prescribed by the hard bargain of the present compact. It will be borne in mind, throughout, that the whole expense of constructing the dam, locks, channel and tow-path, for this connection, is to be borne by Pennsylvania. The committee cannot close their remarks on this point, without calling the attention of the House to a passage in the report of the commissioners, which seems to them to require explanation. At page 5 they say:

"Whilst this arrangement secures both the ascending and descending trade of the river, it provides the means, without any additional expense, of a communication between the Pennsylvania, and the Delaware and Raritan canal. The guard lock necessary at the head of our feeder, and the deep water which will be created across the river by the dam, will, should the Delaware and Raritan company lock down into it from their feeder, make this communication complete.—Although the agreement does not stipulate that this shall be done, and both parties are at perfect liberty to act as they think proper, yet the public interest and convenience must soon accomplish this purpose.—*Indeed we have good reason to believe that the Canal Commissioners have it already in serious contemplation.*"

Whether this "serious contemplation" of the canal commissioners is to extend to the actual construction of an out-let lock by virtue of their discretionary power only, is a question the committee will not stop to ask. They state it merely as a matter of appropriate consideration to the body whence all ministerial authority is derived.

The third proposed benefit from the compact, will require comparatively little notice from the committee.



It is the removal of existing obstructions at Scudder's Falls. This is no doubt desirable, but it has occurred to the committee, that if undue importance has not been attached to it, language more loose and ambiguous, never was used to secure an important right. The works of the Delaware Falls company, are confessedly an infraction of the rights of Pennsylvania, and as such in fact, and in contemplation of law a nuisance. Their removal should have been made a condition precedent, instead of which the commissioners have been satisfied with a provision that the obstruction is to be removed or *otherwise obviated*. Mr. Gay states that the only effectual mode of rendering the navigation uninterrupted at this point, will be to remove the present works altogether, and the committee believe that when the compact shall hereafter be interpreted by the searching eye of selfish interest "*otherwise to obviate*" the obstruction will be found quite inadequate for the preservation of our interests. A partial removal of the obstruction it appears was made during the negotiation and the commissioners seem to have satisfied themselves with a pledge, not from the State of New Jersey, but from the company, that there should not in future be any cause for complaint. The committee cannot but regard this as affording inadequate security.

4. The committee have scarcely allowed themselves time to dwell as fully as they wished on the probable effect of the proposed dam at Wells' Falls on the river trade. This consists mainly now of lumber, which, in the form of rafts, is floated in the channel of the river to the city of Philadelphia, and for the supply of the down river counties. The committee have been anxious to ascertain with some precision, if only by estimate, the annual amount of the Delaware lumber trade. It is, however, scarcely appreciable. It is estimated that the county of Wayne alone, in a single year has sent one hundred thousand dollars worth to the Philadelphia market. The counties of Northampton, Pike, Wayne, Luzerne and Susquehanna, in Pennsylvania, and Sullivan, Delaware, Broome, Chenango and Otsego counties, in New York, supply nearly all the lumber that descends the river. In some of the New York counties Sullivan especially, the citizens of Pennsylvania own extensive lumber tracts, the value of which mainly depends on a free "river avenue" to market. The citizens of Pennsylvania who live upon the upper waters of the Delaware, have gone into a rough and for farming purposes a sterile country. They are emphatically an industrious and enterprising population. In full confidence in their rights, pre-existent to any compact, and in the plighted faith of Pennsylvania and New Jersey, in the agreement of 1783, they have purchased land, have undergone all the hardships incident to the first settlement of a wilderness, and they now ask that the great highway which nature has given them, may not be impeded, for remote, uncertain, and speculative advantages to others.

The committee are aware that some of the engineers who have examined the river at its different points, have expressed the opinion that a dam and sluice, as proposed, would benefit rather than impede the descending navigation. To this opinion is opposed the unanimous sentiment of all the practical watermen who have been consulted on the subject. In their own body, the committee were fortunate enough to have a share of practical experience, which they have readily accepted; and for the following view of this part of the subject, on the faith of that practical experience, the committee are willingly responsible:—

The proposed dam, placed as contemplated, will be about forty rods above the entering of the falls, or what is termed by the raftmen and boatmen, the "*Jersey entering rock*." At this place in the falls the water "rushes impetuously" over a ledge of rocks. Near at the entrance there is in low water, or a common freshet, barely room for a raft of lumber of thirty feet in width to pass. The greatest difficulty is, that rafts approach

this place in the falls with too much rapidity now, and it requires the most experienced men to run a raft or boat through them with safety. If these then are the facts, the effect of a dam so near the head of the falls will be to increase the velocity of the descending craft in a four-fold proportion, and consequently an increased difficulty of navigating the raft, ark or boat, with additional risk. It is urged by many of the most experienced watermen that a dam cannot be built on as formidable a stream as the Delaware which can be passed by rafts or boats with any safety from the centre of the dam. It is well known by raftmen that a dam cannot be built at the head of a falls, and a sluice left in the centre which will regulate the current of the river below, or which shall direct the current with any certainty to a given point. The tendency of water to preserve a level—the force with which it passes on an inclined plane, however gentle, where an unusual quantity is forced down, and the difference of the course of the current as the water is higher or lower—all go to prove conclusively that the proposed dam would increase the present difficulty of entering Wells' Falls, if not entirely destroy the descending navigation. One other effect of the dam must not be lost sight of—the probable destruction of the shad fisheries, which the committee honestly believe would be one of the first consequences of the erection of the dam.

On the whole, in examination of this compact, as will be easily believed, the committee felt a strong anxiety, putting aside their other scruples, to confirm the agreement if possible. They fully appreciate the necessity of some action on the subject, knowing as they do, how strong the inducements are to agree upon some terms for the mutual use of a portion of the waters of the river, and it has been with sincere reluctance that they have been compelled to come to the conclusion, that the compact, on its merits as well as in its forms, ought not to be confirmed. To say that the interests of Pennsylvania have been sacrificed, would be to impute motives to those who have sanctioned the arrangement, such as this committee would be the last to attribute; but to say that inadequate information, or precipitate action, has led to a decision by which those interests would be destroyed, is no more than the simple truth, as it appears to the committee. The attitude of Pennsylvania ought never to be that of a suppliant to her sister state, still less ought she to join in a conspiracy to violate the rights of the absent and unheard. She ought not even to be suspected. Her state-rights are the rights of an honest, and in honesty, a fearless state. Her interests are strictly consistent with those rights, and while the committee have, as they have already stated, been anxious to withhold approval to even an apparent departure from her principles, they have found in this agreement little that secures or protects her well ascertained and dearest interests.

The committee, therefore, unanimously recommend the adoption of the following resolution:

Resolved, That it is inexpedient to ratify the compact executed on the 23d November, 1834, between the Commissioners of Pennsylvania and New Jersey, relative to the use of the waters of the river Delaware.—[For numerous documents on this subject, see Register Vol. III. Vol. IV. page 365, Vol. V. p. 88, Vol. VIII. p. 232, 366, Vol. IX. p. 119, Vol. X. p. 119. &c.]

#### THE WEATHER.

Fahrenheit's Thermometer, in Chestnut street, near the Mint.

Feb. 1,	at 6 in the morning,	Mercury stood at	30.
Feb. 2,	do	do	at 22
Feb. 3,	do	do	at 18
Feb. 4,	do	do	at 14

On Wednesday last there were twenty-four steamers at Pittsburg, most of which were either unloading or loading.

## METEOROLOGICAL REGISTER.

*Extract from the Meteorological Register, taken at the State Capital—Harrisburg, Pennsylvania.*

By JAMES WRIGHT, Librarian.

JANUARY, 1835.

Day of the month.	Day of the week.	Sun rise.	1 o'clock, P. M.	Sun set.	Mean.	Height at sun rise.	Height at 1 o'clock, P. M.	Height at sun set.	Mean height.	WINDS.	STATE OF THE WEATHER.
THERMOMETER.						BAROMETER.					
1 Thursday,	26	30	29	28		29.60	61	62	29.61	SE Moderate.	Clear—Cloudy.
2 Friday,	24	37	39	33		62	62	62	62	NNW "	Clear—Cloudy.
3 Saturday,	16	17	17	17		95	30.00	30.00	98	NNW "	Clear day.
4 Sunday,	00	12	13	8		30.10	10	8	30.09	NNW "	do. do.
5 Monday,	*9	11	14	5		29.96	96	90	29.94	NNW "	do. do.
6 Tuesday,	9	25	25	20		95	92	92	13	NNW Brisk.	do. do.
7 Wednesday,	5	14	18	12		30.00	30.00	30.00	30.00	NNW Moderate.	do. do.
8 Thursday,	3	12	15	10		29.95	95	95	29.95	NNW "	do. do.
9 Friday,	*5	15	18	9		95	95	95	95	NNW "	do. do.
10 Saturday,	*3	19	23	13		97	97	97	97	NNW "	do. do.
11 Sunday,	7	26	29	21		80	80	80	80	NNW "	do. do.
12 Monday,	7	22	30	20		80	78	74	77	SE "	Clear—Cloudy.
13 Tuesday,	26	41	41	36		70	66	65	67	E "	Lightly cloudy.
14 Wednesday,	36	44	47	42		42	40	42	41	W "	Rain—Lightly cloudy.
15 Thursday,	32	45	45	41		58	51	43	51	E "	Fog—Sun & clouds—Rain at n't
16 Friday,	39	42	41	41		40	44	54	46	W Brisk.	Cloudy day.
17 Saturday,	32	39	39	37		83	85	86	85	W Moderate.	do. do.
18 Sunday,	29	35	34	33		80	80	77	79	N "	Cloudy—Clear.
19 Monday,	19	33	37	30		80	76	75	77	E "	Sun & Clouds.
20 Tuesday,	31	42	41	38		62	62	62	62	NE "	do. do.
21 Wednesday,	36	42	41	40		63	44	36	48	E "	Cloudy—rain in the evening.
22 Thursday,	32	43	44	40		36	41	50	42	W Brisk.	Clear day.
23 Friday,	32	46	45	41		63	68	76	69	W "	do. do.
24 Saturday,	33	39	40	37		30.06	7	7	30.07	E Moderate.	do. do.
25 Sunday,	33	35	40	36		29.84	74	60	29.73	E "	Rainy day.
26 Monday,	37	44	44	42		47	41	34	41	NE "	Foggy day—Rain at night.
27 Tuesday,	39	49	49	46		56	58	55	56	SE "	Sun & Clouds.
28 Wednesday,	42	47	46	45		40	50	67	52	NW Blustering.	do. do.
29 Thursday,	32	43	45	40		93	93	88	91	E Moderate.	Clear—Cloudy—rain at night.
30 Friday,	37	43	45	42		53	43	38	45	E "	Rainy day & fog—heavy rain at n't
31 Saturday,	37	41	38	39		13	13	15	14	SW Blustering.	Cloudy day.

*Thermometer.*

Maximum on the 27th,	46°
Minimum on the 5th,	5
Difference,	41
Mean,	30

\* Below zero.

*Barometer.*

Maximum on the 4th,	30.09 inches.
Minimum on the 31st,	29.14 "
Difference,	00.95 "
Mean,	29.71 "

From the Pittsburgh Gazette.

PITTSBURG.—Two more very important steps are about to be made in the advancement of our city to that eminence which it is destined to attain. It will be seen, by our advertising columns, that a daily line of steam boats will commence running from this city to Louisville, on Monday, the 23d of February next. It will also be seen that the Western Transportation Company are making arrangement, for the speedy conveyance of passengers, in comfortable boats, from Philadelphia to this place. These improvements in our traveling conveniences are both very important, and will greatly increase the resort to our city by travelers both on business and pleasure. They will also, no doubt, draw a vastly larger amount of merchandise and produce in this direction.

If the arrangements for the dispatch of a steam

boat every day at 10 o'clock, A. M., is strictly adhered to, and we have no doubt they will be, traveling from Philadelphia, or any eastern city, to any place along the Ohio, will be greatly expedited, and the time necessary to make the trip can be readily estimated beforehand.

It has been a sore grievance to travelers, on the western waters, that there was no dependence to be placed upon any assurances that steam boats would start at any particular hour. The commencement of a daily line will at once remove this source of annoyance.

The enterprising projectors of this improvement in our facilities for traveling, merit, and will no doubt receive, substantial evidences of public approbation.

## PENNSYLVANIA CANAL FROM COLUMBIA TO THE MARYLAND LINE.

Petition for the extension of the Pennsylvania Canal from Columbia to the Maryland Line—Read in the House of Representatives, January 13, 1835, and ordered to be printed.

### PETITION,

To the Honorable the Senate and House of Representatives of the Commonwealth of Pennsylvania.

The petition of the undersigned inhabitants of the Valley of the Susquehanna, respectfully represents:

That the chain of internal improvement now provided for by law, when completed, will still leave this section of country, admitted to be the richest in mineral productions within the Commonwealth, without that means of communication with a market, of uniform construction, which the nature of its products demands. The vast fields of Bituminous and Anthracite Coal on the West and North Branches of our river, to enable them to be worked to advantage, require a connected canal navigation from their respective localities to tide water. Without this they cannot be brought into competition with the mines of the same material, situated upon the waters connecting with the Delaware, and consequently the immense wealth now embowed in the earth, in those quarters, must continue inactive.

Large calculations are made in your Treasurer's annual report, of the future revenue to be derived from the Branch Canals. You are informed that "the North Branch canal now reaches the heart of the immense coal region, co-extensive with the whole valley of the Wyoming. In the extent and quality of coal in the facilities of mining and transportation, the valley of the Wyoming is considered to possess advantages superior to any region of the State," and that "the West Branch Canal passes along one of the richest agricultural districts of the State; when completed to its point of destination, it will afford means of transportation to the most extensive manufactories of iron in the State; and will open a new source of wealth, in the inexhaustible mines of Bituminous coal, bordering on the Susquehanna. That a company of rich capitalists of this and other States, have already made large investments in this region, and have succeeded in manufacturing cokes, the value of which, in the manufacture of iron, is found to be in the proportion of 10 to 26, compared with the usual fuel, in favor of the former." The same report also informs you that the period is not far distant, when the towns watered by the Chesapeake, and the city of Baltimore, will contribute to the consumption of the Susquehanna coal; and we add our hope that the iron works, steam boats, and machinery of all descriptions propelled by steam, of that region, will also speedily be supplied with the coke and bituminous coal of the West Branch. "When such an event takes place," (we again quote from the report) "this branch of the Pennsylvania canal will form an advantageous comparison with the productiveness of the Schuylkill navigation." The value of the latter may be calculated from the price of its stock, which now sells for \$120, for \$100 paid. Yet is this but in its infancy, and its present compared with its prospective operations, are insignificant, as we shall show.

The value of these branches of the Pennsylvania canal, thus anticipated, however, must depend on its extension to tide water, either by the further exertions of the Commonwealth for that purpose, or by individual capital. The coal of these waters, can never bear the expense of transportation, when to this shall be added the loss, delay, and necessary charges of a transfer of loading from a canal to a rail road. The Union canal will never be able to carry off more than the agricultural products of the country, if sufficient for that. The products of the forest and mines must seek some other course to market, and no other is deemed at once safe

and adequate, but that of a continuation of the Pennsylvania canal from Columbia to the Maryland line.— Until this be accomplished the whole lumber and coal of the Susquehanna, destined for the Chesapeake markets will pursue the precarious, and very often ruinous channel of the river. The consequence will be, that comparatively little of the mineral will be sent. The coal business to be profitable, must be regular, and cannot be successfully conducted while dependant on the freshets of the Susquehanna for a highway to market.

To Pennsylvania will the whole Sea board of the United States, and before many years, the West India Islands, be tributary for their fuel; and when the immense importance of the coal trade elsewhere is considered, the policy of giving extension to it here, by every practicable means, admits of no possible doubt. A few facts will illustrate this. Birmingham, Manchester, Glasgow, Leeds, &c. owe their comparative advancement and importance to the great abundance and cheapness of fuel at those places. From similar causes, similar effects will result, and it will necessarily follow that the great manufacturing capital of the United States, will centre in those situations, which will afford the greatest facilities in procuring the same indispensable material. Pennsylvania is, therefore, its natural locality; and of this we have evidence in the multiplication of manufactures at Pittsburg, and Philadelphia, and the rapid growth of these cities within a few years past.

In the year 1828, the importation of coal into London alone, amounted to 1,541,000 chaldrons of 36 bushels each; and in the whole of Great Britain, in the same year, the consumption is stated to be the enormous quantity of 15,580,000 tons, exclusive of exportation. On the Tine and Wier, about 21,000 hands are employed in digging and delivering it to the ships on the rivers, and about 15,000 seamen are employed in transporting it to various parts. These facts disclose how inconsiderable the business is yet in this country. The whole amount of coal forwarded to market from the Schuylkill, Lehigh and Lackawanna, the present season, (26th December, 1834,) is but 379,000 tons, and this exceeds the amount of last year by about 200,000. But the facts of the English coal trade also disclose the immense results that may be anticipated, of our own, if duly fostered and elicited. In addition to the permanency and cheapness, that will be ultimately secured to our manufactures, by its means, with, or perhaps without, the protection hereto afforded them, by the Tariff, and the vast demand for labour in the various employments of the trade; an incalculable increase will be made to the coasting trade of the country, and a nursery for seamen created that will give stability to the Navy of the Union. The coal trade of England supplies more seamen to the navy, than any other branch of the coasting trade of that country.

But we beg leave to pursue this subject further.— The pig iron manufactured in the United States, in the year 1831, according to the report made to the New York convention by the committee appointed for that purpose, amounted to 191,536 tons, the imports of the same year were, 33,000 tons, the amount consumed therefore, in the United States in that year, was more than 226,000 tons. The estimate, in England, where iron is manufactured by coke, is four tons of coal to the production of one ton of this description of iron.— We suppose that there is an existing annual demand for 100,000 tons, of the cheaper iron prepared by coke, for rail roads, other public improvements and the various uses to which this kind of iron is applied; and that if facilities existed in obtaining it, a consumption of not less than 400,000 tons of the West Branch bituminous coal would very shortly be obtained from the manufacture of iron alone. We are now dependant on England for iron for our rail roads, and Pennsylvania, with all the materials in superabundance for its manu-

factures, yet obtains her supply from abroad. In Maryland, the Eastern part of Pennsylvania, Delaware, and New Jersey, many extensive iron works are in operation which could be supplied with fuel, from the mines, at a cheaper rate, by an uninterrupted canal navigation, than they are at present. But a regular supply would be indispensable to induce the adaptation of furnaces to a change of fuel. If this means of transportation were completed, the supply would be regular, and an article, alike indispensable in peace and war would by the reduction of price be rendered independent of foreign competition.

The fuel consumed by steamboats, is estimated at one cord of wood per day, for every twelve tons burthen. On the western waters of the United States, in the year 1829, the amount of tonnage of this description of vessels in actual employment, is stated to be about 35,000 tons, and which therefore required 2,917 cords of wood every 24 hours. If an equal amount of tonnage in steam vessels exist on the seaboard, and the waters in connection therewith, and which we will suppose to be the case, estimating one ton of coal to be equal to nearly three cords of wood, the consumption would amount to 1,000 tons per day, if coal were used in steamboats alone—and this for nine months in the year would amount to 270,000 tons! Very nearly equal to three fourths of the whole produce of the mines carried to market the last year.

The consumption of coal in no one of our cities is universal. It is rarely used in kitchens even in Philadelphia. But wood is a much more expensive fuel, and will necessarily be superseded in use by the cheaper. In the city of London, the amount of coal consumed in 1828 calculating 30 bushels to the ton, was 1,849,200 tons. The population of that city was then about 1,208,000, the consumption therefore was more than a ton and a half to an inhabitant. The population of Philadelphia is now about 170,000, and at the London rate of consumption would require 255,000 tons, more than double the estimated consumption of the present year.

We trust it will not be deemed an exaggerated estimate to suppose, that there are a million of population along the seaboard of the several States, who would at this day find it to their advantage to burn coal in preference to any other fuel, if it could be had—and that the impossibility of procuring a supply, alone prevents the consumption of a million of tons.

We would ask, why it is that the Councils of the City of New York, have petitioned Congress to abolish the duty on coal? Certainly not from hostility to Pennsylvania, but because the enlarged and increasing consumption requires a larger supply than we have the means of furnishing to them. We should not be surprised, if other cities, not interested in the mineral, were to pursue a similar course. Let us prevent them by extending our means, and furnishing all they require.

Besides the advantages above enumerated, another consequence of the opening the mines on the branches will be, to raise the value of the lands in all the surrounding country, by creating a market for agricultural products, and causing their settlement and improvement. Immense bodies of land in the coal regions, on either branch, fit for culture, lie waste, in the settlement of which the community is deeply interested. Mauch Chunk and Pottsville consume a large portion of the surplus produce of the borders of the Susquehanna; and if a canal extended to tide water, should give rise to similar establishments on the branches, in situations equally inviting them, the demand for the produce of the farmer would be doubled, and the northern and western portions of the State rapidly teem with population.

And when we consider the number of merchants, factors, clerks and agents of various kinds, that would be required in the transactions of an extensive trade in

this single product of our State, and the encouragement given to artists, mechanics and manufacturers in the construction of rail roads, and the various machinery used in and about the mines; it becomes almost impossible to form an estimate of the advantages that must ultimately, and we trust, shortly, result from its enlargement to the extent which its importance demands.

In short, the minerals of Pennsylvania have placed in her power the means of subsistence to a more numerous population, more abundant inducements to the establishment of every species of manufacture, and the materials of a more enlarged commerce than exist within the limits of any territory of equal extent, on this side of the Atlantic. If she will not avail herself of these advantages, and be content to remain less than the first state in the Union, the fault will be her own.

A consideration of the preceding facts and arguments, convinces your petitioners, that all the channels of communication which it may be practicable for Pennsylvania, to open with the seaboard, from the coal fields within her limits, will not be adequate to afford a supply for years to come, commensurate with the demand, and they are not less convinced that an extension of the Pennsylvania canal, from Columbia to tide water, would, in brief time, be the means of doubling the supply to be obtained from all other quarters. Wealth and prosperity would be returned into the interior of the State, by the same channel in exchange for a material, which without this medium of transportation to a market, must remain unproductive and useless. They, therefore, pray your honorable bodies to extend the Pennsylvania canal from Columbia to the Maryland line, or if that measure shall not be deemed expedient at this time, on the part of the commonwealth, then to incorporate a company to form a canal of the same dimensions with the Pennsylvania canal, to unite with the same at Columbia, and to be extended thence to the Maryland line, reserving the right in the commonwealth to purchase the same from the stockholders, after thirty years from the time it shall have been completed, provided that not less than the amount of the sums subscribed and paid together with six per cent. interest thereon, per annum, shall be refunded to the holders of the stock.

And they will pray, &c.

#### CHARITY SCHOOLS.

Annual Report of the Board of Managers of the Philadelphia Society for the establishment and support of Charity Schools, with the Annual Report of the Treasurer, January 6, 1835.

To the Philadelphia Society for the Establishment and Support of Charity Schools, the Twenty-fourth Annual Report of the Board of Managers is respectfully submitted.

At the period of the last annual report, there were 510 children in the Schools, viz: 260 boys, and 250 girls. During the present year, there have been admitted 201 boys, and 238 girls; and 162 boys, and 225 girls have left the school. The aggregate number of scholars at this time is 483, of which 230 are boys, and 253 girls. Of the present condition of the Schools of the Society, the following statement furnishes a brief view, viz: In the school for the higher branches, taught by Z. D. Brazier, there are 45 boys instructed in English Grammar, Geography, with the use of maps and globes, History of the United States, and the higher branches of Arithmetic, including the mathematica.—In the primary school, in charge of Joseph W. Roberts, there are 135 boys, all of whom read, 70 write on paper, 116 cypher; the more advanced scholars being transferred to the high school, as vacancies occur in that department.

In the literary department of the girls school, under

care of Margaret Bonsall, there are 253 pupils; of which number 224 read, 100 write on paper, 129 cypher, and 28 are learning geography. The sewing department, in charge of Hannah Smith, is composed of about one third of the whole number of girls, taken in rotation from the literary apartment, who are instructed in the various branches of needle work; and, as an evidence of the attention given to this important branch of female education, it may be stated, that during the past year, upwards of 1,100 garments, and other pieces of work, were "commenced and finished," besides which, numerous articles of clothing, &c. partly made by the children at their homes, were completed at the school.

The Managers have pleasure in reporting that the general condition of the Schools exhibits a degree of order, and an advancement, alike creditable to the teachers and to the children under their charge. No branch of the Institution is more worthy of remark, than the schools for girls. A visit to these schools, and to the boys' departments, cannot fail to be peculiarly gratifying to any member of the Society.

The Library belonging to the Schools has been under the charge of a standing committee of the Board. In a report just received from that committee, it is stated, that "by the liberal contributions of the Managers and others, they have been enabled, during the past year, to add to the library 221 volumes," which, with the previous collection, makes the whole number about 950 volumes, carefully selected, and well adapted to the instruction and amusement of the youthful readers. As to the usefulness of this library, the experience of twenty years leaves no question. The committee remark, (on the assurance of teachers) "that the anxiety of the children to obtain books to read has increased, and their deprivation of them seems to be considered as one of the most severe punishments."

Under authority of the Society, the Managers have purchased a lot in Kensington, adjacent to the ground which they previously owned, for the sum of \$314 50. The Kensington property, although hitherto unproductive, will, it is hoped, in the progress of improvement in that district, ultimately yield a handsome income.

It is already known to many of the members, that Paul Beck, junior, one of the most benevolent and public spirited citizens of Philadelphia, has presented to the Society a large brick School House, with the lot on which it is erected, situated on Catharine, near Sixth street, in Moyamensing, for the purposes of gratuitous education.

A deed for the property has been executed and put on record, and the policy of insurance on the building has by the donor, been transferred to the Society.—The funds of the Institution being insufficient at present to maintain any other school than those they now have in operation, the Managers are taking such measures as will, they trust, render the property productive, until such addition to their funds is obtained, as will enable them to support a school therein.

The Managers deem it due to the memory of an old and worthy associate, to record in their report the name of the late John G. Simmons, who died in the last summer, having been a diligent and useful member of the Board for twenty three years.

The Philadelphia Society for the Establishment and Support of Charity Schools, was the first Institution incorporated by law, for the sole object of educating, gratis, children of the poor, in the City and Liberties, "without regard to the country or religion of their parents or friends." Under the kind providence of Him "whose heritage children are," its affairs have thus far prospered, and more than 10,000 pupils have partaken of the benefit of its Schools.

Extensive public provision being now made for the free instruction of indigent youth, this Society has of course, lost its novelty. The field of labour is, however, still so ample, that by the care and attention of its mem-

bers, much good remains to be done in the faithful employment of the funds committed to their trust.

By order and on behalf of the Board of Managers.

RICHARD OAKFORD, Chairman.

JOHN B. ELLISON, Secretary.

Philadelphia, Dec. 26, 1834.

## ANNUAL REPORT OF THE TREASURER.

To the Philadelphia Society for the Establishment and Support of Charity Schools.

The Treasurer respectfully annexes his annual statement for the past year.

Received from members, less commissions for collecting,	\$161 40
Interest received this year,	1,329 36
Rents, less Repairs,	520 58
Ground Rent, John Evans's Legacy,	36 00
Library Share, less yearly tax,	1 00
Bonds paid in,	1,653 00
Union Canal Share,	174 56
Five copies Life of Christopher Ludwick,	1 25
Balance in Treasurer's hands at last report,	264 23

Paid Teachers and Expenses,	2,049 27
Paid for Kensington Property,	314 50
Paid for Mortgage,	1,500 00
	<u>3,863 77</u>

Balance due the Society, \$277 53

The Treasurer in presenting his annual statement to the Society, informs them that the Interest and Rents are all collected (except twenty dollars of back rent.) The Kensington property yet remains without his having any knowledge of any thing having been received from it the past year.

GEO. PETERSON, Treasurer.

Philadelphia, 1 mo. 6th, 1835.

## COAL TRADE.

All facts and statements connected with our coal trade, are now matters of great interest to the public: and the growth and progress of this important branch of public industry, has always commanded the attention of the editor. To this trade in its various branches, our city and state must hereafter look for the full display of her great and inexhaustible resources. We refer our readers to the following authentic statements rendered to our Legislature by two of the Coal Companies, handed to us for publication, by a subscriber, with a promise that he will add in our next, that of the Lycoming Coal Company—all reported in compliance with their acts of Incorporation.

In compliance with the Acts Incorporating the Delaware Coal Company, the following statements are presented to the Legislature, "showing the amount of their Capital actually paid into the funds of the Company, the sums expended, and the profits within the year, and the amount of Dividends declared within each year."

*Statement of the Business of the Delaware Coal Company, from November 30, 1833, to November 29, 1834.*

Dr.

To Coal on hand in Philadelphia, and on its way down the Canal, Nov. 30, 1833, toll & freight charged, estim'd quan-

tity, 3,237 tons, valued \$3 50 per ton,	\$11,329 50	
To 36 Canal boats, at valuation Nov. 30, 1833,	9,728 16	
Personal property per inventory and valuation, November 30, 1833, in Schuylkill county and Philadelphia, viz. rail road and mine wagons, horses, mules, iron, lumber, mining tools, &c.	12,338 75	\$33,396 41
Mining and hauling Coal to Mount Carbon, 25,221 tons, 10 cwt.	20,866 61	
Rail road tolls on ditto, to Mount Carbon,	3,301 20	
Canal tolls and freight on ditto, from thence to Philadelphia,	50,248 14	
Wharf and contingent expenses, taxes, salaries, personal property purchased, and improvements made in Schuylkill county, deducting rents received, balance,	3,963 14	73,379 09
Wharf and office rent, salaries, labour, hauling coal, contingent expenses, and personal property purchased in Philadelphia, &c. &c.	10,259 73	
Balance of interest account and discounts,	5,708 71	
Balance carried to credit of profit and loss,	28,093 94	
		<u>\$155,837 88</u>

By Retail and cargo sales and shipment of 25,999 tons 2 cwt. 2 qrs. of coal,	\$126,292 32	
By coal on hand in Philadelphia, and on its way down the canal Nov. 29, 1834, (toll and freight charged) estimated quantities, 2,413 tons valued at \$3 50 per ton,	\$8,445 50	
35 Canal boats per inventory and valuation,	9,178 45	
Personal property per inventory and valuation, November 29, 1834, in Schuylkill county and Philadelphia, viz. rail road and mine wagons, horses, mules, iron, lumber, mining tools, &c.	11,921 61	29,545 56
		<u>\$155,837 88</u>

*General Statement of the Affairs of the Delaware Coal Company, November 29, 1834.*

Dr.

To Capital Stock actually paid in—		
1,001 shares at \$50	\$50,050 00	
3,999 do \$25	99,975 00	
		<u>\$150,025 00</u>
5,000		
Loan, certificates and balances in favour of sundry persons,	95,392 88	
Profit and Loss, balance per statement November 30, 1833,	\$28,315 36	

Add credits to profits and loss, from November 30, 1833, to Nov. 29, 1834,	911 31	
		<u>29,226 67</u>

deduct paid dividend declared January 1834, six per cent. on \$149,750,	8,985	
do. do. July do. 3,985		
"state tax 8 per ct. on \$17,970, (dividends)	1,437 60	
		<u>19,407 60</u>
		9,819 07

Profit and loss, balance per statement of the business of the company from November 30, 1833, to November 29, 1834,	28,093 94	
		<u>37,913 01</u>
Deduct placed to credit of " Reserve Fund,"	13,608 60	
		24,304 41
" Reserve Fund" for coal mined, 64,043 tons, at 20 cents,	13,608 60	
		<u>\$283,330 89</u>

By Real Estate per account of November 30, 1833,	\$180,333 27	
Cash balances at Philadelphia and Mount Carbon,	5,451 92	
Coal on hand in Philadelphia and on its way down the canal, Nov. 29, 1834, (toll and freight charged,) estimated quantity, 2,413 tons, at \$3 50 per ton,	8,445 50	
35 Canal boats per inventory and valuation,	9,178 45	
Personal property Schuylkill county and Philadelphia, viz. rail road, mine wagons, horses, mules, iron, lumber, mining tools, &c. &c. as per inventory and valuation, November 29, 1834,	11,921 61	34,997 48
Balance of sales and shipments and accounts in favour of the Company,	67,800 14	
		<u>\$283,330 89</u>
Profits and Loss, balance Nov. 29, 1834,	\$24,304 41	

CITY OF PHILADELPHIA, S. S. Personally appeared before the subscriber, one of the Aldermen of the said city, John White, President of the Delaware Coal Company, who being duly sworn, doth depose and say that the above statement of the Business of the Delaware Coal Company, from the 30 November, 1833, to Nov. 29, 1834, and the General Statement of the Affairs of the Delaware Coal Company, November 29, 1834, exhibit a just and true statement of the affairs of the said Company, as they stood on its books on the 29th November, 1834.

JOHN WHITE.

Sworn to and subscribed before me this 30th day of January, A. D. 1835.

J. BURDEN, Alderman.

*The North American Coal Company, respectfully beg leave to present to the Legislature the following statements in compliance with the requisition of the act of Assembly of this Commonwealth, entitled "An Act to incorporate the Conneautte Library Company in the county of Erie, and for other purposes, and the Act entitled an Act to incorporate the Lycoming Coal Company.*

No. 1. The Capitol Stock, Except,	10,000 shares at \$25 per share,	\$250,000	
	282 shares equal to	7,050	
Giving,		9,718 shares issued equal to	\$242,950 all of which have been paid in, or the Stock at par value in payment for the coal Lands, now held, and worked by the Company.
No. 2. The Expenditure at Pottsville during the year ending the 31st December, 1834, in the mining apparatus have been \$41,521 64 viz:			
	Paid miners,	\$22,344 62	
	Canal toll,	18,877 25	
			\$41,221 87
	Taxes on their Coal Lands,		299 77
			<u>\$41,521 64</u>
No. 3. The Company have mined and brought down 19,861 tons, which cost on board the Boats at the mines, The Company's Expenditure at Philadelphia, for the year ending the 31st December, 1834, have been, viz: Freight paid on their own hired boats, Wharf charges, Interest on Loans on notes received for coal, and discounted, Rent of the wharf and office, Salaries to the officers,			
		\$41,221 87	
		19,098 55	
		5,545 32	
		5,488 05	
		2,000 00	
		2,604 00	
			<u>\$75,957 79</u>
The sales and the shipments during the year ending 31st December, 1834, have been	19,714 tons, for	\$95,895 11	
	There remains on the wharf of the Company,	147 tons, at cost,	441 00
			<u>\$96,336 11</u>
		<u>19,861</u>	
From the sales deduct cost above,			<u>75,957 79</u>
Leaves a profit to the Company of			<u>\$20,378 32</u>
The losses sustained this year have been \$1,571 71.			
The Company at this date, 31st December, 1834, have not declared a dividend.			
N. B. A dividend of 4 per cent, or \$1 per share on the business of the Company for the last year, was declared on 13th January, inst.			

T. M. B.

CITY OF PHILADELPHIA, S. S.

This 27th day of January, 1835, before me the subscriber, one of the Aldermen of the said city, personally appeared T. M. Bryan, President of the North American Coal Company, who upon his oath declared that the foregoing statements, No. 1, 2, and 3, are a true abstract from the books of the said Company.

T. M. BRYAN, Prest N. A. Coal Company.

Sworn to before me this 27th of January 1835.

S. BADGER, Alderman.

From the Pittsburgh Gazette.

## SERGEANT TROTTER.

Mr. Craig:—

In my travels to the city, a few days ago, my attention was arrested by a group of persons assembled near the excavation, in the Northern Liberties. Upon inquiring into the cause of the crowd, I discovered the subject to be that of *three coffins*, which presented their ends, and appeared perfectly sound. It became a matter of some curiosity and idle speculations to all; and many were the conjectures formed as to whom these relics appertained; until a learned drayman, (probably some antiquarian,) relieved the suspense of the multitude, by declaring it the coffin of Sergeant Trotter.—As there were three graves, and at some distance from any cemetery, the mystery was not entirely unveiled. Will you have the kindness to inform us who this Sergeant Trotter was? What caused his execution? and whether this spot of ground was formerly a place of ex-

ecution (30 yards S. E. of Brunot's factory.) Knowing you to be an old residenter of the place, you can, if you please, throw some light upon this subject, and oblige

A STRANGER.

Lawrenceville, Sep. 6.

The above note was received on the day after its date, but we were not then able to reply to it. We are, it is true, as the note states, a pretty "old residenter of the place," but our recollection does not go *distinctly* back to the execution of poor Trotter.—We did recollect that he was executed, while General Wayne lay here, for desertion; we recollect, also, that great exertions were made to save him; it was alleged that he had been entrapped into the service. The army was about entering on very arduous service, and the General deemed it necessary to steel his heart against all intercession, and to permit the execution to take place.

A few days ago, a friend, some years older than we are, happened to see this note, and at once recollected that he had witnessed the execution of three soldiers, at the very spot where the coffins were found.—Our friend does not recollect either the names or the offence of the sufferers. He also states that Sergeant Trotter was executed nearly in front of Lightcap's tavern, in Liberty street.

Wayne's army was at that time encamped on the beautiful plain on the southeast side of Liberty street, and extending from where the Episcopal Church now stands, up towards the canal.

### TOWN MEETING.

At a town meeting convened on the afternoon of the 9th of February, 1835, at the District Court Room, pursuant to the following notice,

"The citizens of the city and county of Philadelphia are requested to meet at the District Court Room, this day, the 9th inst. at 4 o'clock, to recommend to the County Commissioners and City Councils the adoption of such measures as may justify the Legislature in the choice of Philadelphia, as the future seat of the Government of the State."

GEN. ROBERT PATTERSON, was appointed Chairman, and John Thompson, Matthew Newkirk, Joseph Worrell and Elijah Dallett, Vice Presidents, and Jacob Souder and James C. Biddle, Secretaries.

Mr. George M. Dallas opened the meeting, and submitted the following resolutions, which were adopted by acclamation.

Whereas, the expediency of transferring the seat of Government has become a subject of reflection and discussion in the Legislature of this State, and it is not improbable that the Representatives of the People may ultimately determine in favor of a change;—and whereas, without entertaining towards our fellow citizens of Harrisburg any but the most cordial sentiments of respect, and the warmest wishes for their social prosperity, we may convey to the General Assembly, the public officers and agents, the hospitable invitation of the inhabitants of Philadelphia;—and whereas, in relation to a topic so recently submitted for consideration, the sense of this meeting may be accepted by the councils of our city and the Commissioners of our county, as justly and impressively indicating the general, if not universal desire and judgment:—

Resolved, That in case it shall be deemed by the Representatives of the people of this commonwealth; wise and expedient to remove the Seat of this Government from the present capitol, the citizens of Philadelphia, now convened in town meeting, tender to all the departments of that Government, Executive, Legislative and Judicial, whom that removal would embrace, a frank invitation to this place—with an assurance that, in returning to the Home of the Founder, and the Hall of Independence, they will be greeted by the population of the entire district, with sincere and affectionate welcome.

Resolved, That this meeting earnestly and respectfully invoke the Councils of the City and the Commissioners of the county to mature and adopt such measures as may strongly manifest the ardent hopes, and the liberal dispositions of their constituents on this interesting subject.

Resolved, That, in the opinion of this meeting the citizens of the city of Philadelphia would approve with cordiality and pride, an appropriation of any one of their public squares to the accommodation of the Government, the erection of buildings thereon, in all respects adapted to the sessions of the General Assembly, and the Departments of Official business, and the assumption by this city and county, in relief of the treasury of the State, of all the expense necessarily incident to transferring and establishing the Seat of Government here.

On motion of Mr. Dallas, it was resolved that the President of the meeting cause a copy of the proceedings to be furnished to the Select and Common Councils of the City, and to the County Commissioners.

On motion of B. Chew, Jr. the proceedings were ordered to be published in all the newspapers.

ROBERT PATTERSON, President.

JOHN THOMPSON,  
MATTHEW NEWKIRK,  
ELIJAH DALLETT,  
JOSEPH WORRELL, } Vice Presidents.

James C. Biddle,  
Jacob Souder, } Secretaries.

Similar meetings have been held in Germantown and Lancaster.

### DRY GOODS DEALERS.

To the Senate and House of Representatives—in Congress assembled:—

The undersigned, in conformity with instructions from the Importers, Auctioneers, Commission Merchants and Traders engaged in the Dry Goods business in Philadelphia, after repeated meetings, regularly convened for the consideration of the subject set forth in this Memorial, respectfully solicit the early attention of your honorable bodies to the enactment of suitable regulations to establish a Standard of Weights and Measures throughout the Union, and uniform modes of applying and conforming to the same.

Your Memorialists are induced to come before you under a conviction, from experience, that speedy legislation is necessary on this subject, as well for the due fulfilment of the existing laws, as for the advancement of the moral welfare and widely extending commercial interests of our citizens in all parts of the Country.

The various regulations and customs existing in the several States of the Union, uncontrolled by any settled and uniform National Standard, whereby irregularity in weights and measures might be checked, are necessarily productive of much inconvenience to the whole trading community, owing to the different and fluctuating modes of measurement and weight in different places and at different times. What is measure in one place, and on one side of a river, may not be such, and often is not, in another, on the opposite side. Not only the standards of weight and measure are thus at variance, but the modes of administering and conforming to them vary still more, and until the National Legislature shall adopt and enforce the necessary laws to equalize and define a standard which may be uniform and permanent in its operation, your Memorialists see no end to the existing evils, but deprecate the consequences as promotive of those corrupt tendencies which are at variance with the principles of justice and lead insensibly to fraud.

Laws recently enacted by Congress establishing the standard value of the currency, appear to your Memorialists to be wholly incomplete in their operation, unless similar regulations be established for defining and enforcing the modes of measuring those articles in trade, of the value of which the currency is only the representative. In the present unsettled state, buyer and seller have frequently to negotiate, first, what shall be weight and measure; goods transported from one State to another have constantly to be re-weighed, re-regulated or measured anew, and discrepancies and misconstructions varying from what was intended, are perpetually occurring to engender collisions highly detrimental to the interest of trade and dishonourable to our national character.

With these practical views of the subject, which your Memorialists are constrained to present to your notice, and without attempting further to particularize the evils under which our citizens have long labored from the want of an established standard for regulating these



paramount concerns of commercial intercourse, the undersigned, on behalf of their constituents, earnestly and respectfully request of your honourable bodies, such immediate legislation thereon, as in your wisdom may appear expedient.

JOHN A. BROWN, Chairman.

DAVID S. BROWN, Secretary.

Of the meeting of the Importers, Auctioneers, and Commission Merchants of Philadelphia.

MATTHEW NEWKIRK, Chairman.

RICHARD D. WOOD, }  
A. R. PERKINS, } Secretaries.

Of the meetings of the Merchants, Traders, and Dry Good Dealers of Philadelphia.  
Philadelphia, Jan. 24, 1835.

From an account kept by Henry F. R. V. Mollwitz, keeper of the North Mountain Gate, leading from Loudon to M'Connellsburg, on the Chambersburg and Bedford Turnpike, it appears that from the 1st day of January, 1834, to the 31st day of December, 1834, there passed through said gate—

Broad wheeled wagons,	6359—37,664	horses.
Narrow do. do.	374—1,483	do.
Single horse, do.	1243—1,245	do.
Two horse, do.	779—1,557	do.
Carriages,	107—214	do.
Gigs,	153—153	do.
Sleighs,	12—14	do.
Riding horses,		2,817
Heads of cattle,		6,475
Heads of sheep,		2,850
Heads of Hogs,		40
Total number of Broad and narrow wheeled transportation wagons,		6,733
Total number of horses,		45,148

Franklin Repos.

### BROWNSVILLE CONVENTION.

The Committee upon the Mineral, Agricultural, and Manufactured products of the Monongahela region, reported as follows:

The committee appointed to prepare and submit to this Convention a statement of the manufactures and other business of the section of country interested in the contemplated improvement of the navigation of the Monongahela river, present, as the result of their labors, the annexed statement:

The very limited time allowed your committee for the discharge of this duty, has not enabled them to do full justice to the subject. They have avoided making any statements which are not confirmed either by the knowledge of Delegates present, or supported by authentic data; it is their belief, therefore, that any imperfections in this report exist in undervaluing rather than overrating the manufacturing and other interests of the Monongahela region.

On reference to the Statement annexed, it will be seen that the manufactures of flour and other grain, iron and nails, paper, glass, salt, wool, cotton and lumber—the growing of wool, the building of steam engines, steam, keel, canal, and flat boats, amount annually to the sum of two millions two hundred and forty-nine thousand four hundred dollars.

This statement may appear exaggerated, even to this convention, although composed of individuals residing at various points of the district which we are considering. We can readily imagine that very few are prepared to expect this result of our inquiries—we invite, however, a close scrutiny of the report, convinced that a more deliberate and extended inquiry into the subject will only make more apparent the vast importance of the

proposed improvement, not only to the Monongahela region, but to the west and south-west at large.

When it is considered that a business so extensive has been created and continues to exist, entirely dependent upon a precarious river navigation for indispensable supplies, and a market for its products, it is obvious that the natural advantages of the country are incalculably great. Nature has indeed munificently endowed the Monongahela region. Our inquiries extended from Clarksburg, Harrison county, Virginia, over those portions of the various counties on the river to the environs of Pittsburg, which, on the completion of the proposed improvement, would employ tonnage on the river—and throughout this district the climate is salubrious, the soil, for the most part, fertile, and in every direction are to be found inexhaustible mines of bituminous coal, few of which have yet been opened or wrought to any considerable extent, and, in many cases this coal is found closely adjacent to beds of iron ore. We cannot affix a limit beyond which the importance of the manufacturing and agricultural interests of this region may not extend its growth, after the contemplated improvement of the river shall have secured to these interests the facilities of transportation which alone are required to develop fully and bring into active employment the boundless resources of the country.

On the other hand, it is very plain that the business of manufacturing has already begun to languish in this section; and, if not yet diminished, it is clear that this interest cannot continue to flourish under present circumstances.

The manufacturer may deposit his blooms, or pig iron, or flour, or glass, upon the shore; the contractor may finish the building of his boat—up to that point, competing successfully with those located on more navigable waters; and yet the fruits of his toil may be, month after month, awaiting the uncertain rise of water, until contracts are violated, and he is thrown unreasonably, upon the chances of a market already chiefly supplied.

The report of Dr. Howard, communicated to Congress in April last, proves that the improvement in the navigation of this river, from Pittsburg to Brownsville, may be effected at a cost considerably short of a quarter of a million of dollars. A similar sum, it is believed, would continue the work as high as Harrison Co., Va. The whole sum required, then, to complete this important improvement would be less than a half million of dollars.

Your committee indulge the hope, that the great benefits which this moderate expenditure of public money promises to dispense far and wide, will insure its appropriation.

#### Statement.

Merchant flour mills,	270 flour,	\$405,000
do. do. steam,	30 do.	267,800
Steam saw mills,	32 lumber,	57,600
Water do.	272 do.	81,000
Paper mill,	8 paper,	190,000
Salt works,	7 salt,	30,000
Woolen factories.	4	95,000
Cotton do.	2	40,000
Rolling mills,	2	37,000
Green glass works,	12	175,000
Vial do. do.	2	40,000
Blast furnaces,	12 500 tons each.	100,000
Forges,	7	78,750
Air furnaces,	4	64,000
Nails,	1	8,250
Engines,	2	50,000
Tonnage 20 st. boats, 3,000 tons, a \$70		{ 200,000
Do. keels, flats, and canal boats,		
Coal,		
Wool, grown,		200,000

\$2,249,400

## A STATEMENT,

*Exhibiting the number of Commitments received at the Jail of the City and County of Philadelphia, (ARCH STREET,) For the years 1833 and 1834, the Offences, Sexes, &c.*

1833.

Total number each month.									
MONTHS OF THE YEAR.	Charged with being Disturbers of the Peace, Idle, and Disorderly.	Charged with misdemeanors, and other offences punished by fine and imprisonment.	Charged with Felonies, and other offences punished by fine and imprisonment at hard labor.	Convicted as Vagrants, and for Profane Swearing, and Intoxication.	Number of Males.		Number of Females.		
					White.	Black.	White.	Black.	
Jan.	53	46	44	99	123	56	21	42	242
Feb.	77	68	50	66	150	45	29	37	261
March.	49	66	67	62	120	60	21	43	244
April.	54	118	78	113	186	72	48	57	363
May.	42	121	90	121	201	58	49	66	374
June.	63	118	99	134	201	75	66	72	414
July.	64	154	87	125	224	63	56	87	430
Aug.	54	138	106	170	233	70	66	99	468
Sept.	79	118	67	126	211	61	45	73	390
Oct.	87	118	47	60	172	72	33	35	312
Nov.	74	97	82	94	192	61	39	55	347
Dec.	62	95	63	76	154	64	37	41	296
Total.	758	1257	880	1246	2167	737	510	707	4141

1834.

Jan.	91	99	60	48	156	60	30	52	298	
Feb.	64	111	76	59	142	64	51	53	310	
March,	58	66	42	98	141	48	35	40	264	
April,	60	97	77	116	155	88	40	67	350	
May,	72	129	125	132	225	96	46	91	458	
June,	76	104	79	150	186	81	50	92	409	
July,	88	189	114	204	274	126	71	124	595	
Aug	67	252	111	179	318	104	81	116	609	
Sep.	91	99	73	168	231	90	50	60	431	
Oct.	69	81	51	146	175	62	56	54	347	
Nov.	105	77	49	148	176	79	52	72	379	
Dec.	97	67	57	109	156	89	46	39	330	
Total,	938	1371	914	1557	2335	987	608	850	4780	
Tot. in	1826	719	652	948	1145	1646	561	688	569	3464
1827	827	881	868	1369	1995	687	704	559	3945	
1828	775	991	780	1527	2037	690	760	586	4073	
1829	642	699	736	946	1490	510	516	501	3017	
1830	791	1102	608	1431	1872	758	618	684	3932	
1831	816	1187	752	1751	2218	850	686	752	4506	
1832	697	1135	954	1719	2287	820	669	739	4515	
1833	758	1257	880	1246	2167	737	510	707	4141	

Published by order of the Acting Committee of the Philadelphia Society for alleviating the miseries of Public Prisons.

JAMES J. BARCLAY.

From the Village Record.

## WEIGHT OF CATTLE.

We have been furnished with the following list of the weights of Cattle, by a gentleman who takes an interest in agricultural improvements. The Cattle published in the last RECORD, were acknowledged by all who examined them, to be very fine; but judging from the weights of the following, from old Kennett and the adjacent townships, we are inclined to think them more of the Crocket species—for they "GO AHEAD!" On the 7th January, we published an account of six cattle, raised by Enoch Dixon, of Kennett, the heaviest of which weighed 2562 pounds. What say our Brandywine farmers to these things?

Live weight of a part of the Cattle weighed on the platform hay-scales at Kennett Square, Chester county, from the 25th of December to the 1st of Feb. 1835.

James Walter, Kennett,	One ox,	1918
do.	do.	1911
William Sinclair, Kennett,	do.	2212
do.	do.	2159
Francis Seal, New Garden,	do.	2100
do.	do.	1803
Robert Pool, Mill Creek Hundred, Delaware,	do.	1841
do.	do.	1806
John Dixon, Kennett,	do.	1785
do.	do.	1764
Michael Gregg, Kennett,	do.	1792
do.	do.	1638
John Philips, Kennett,	do.	1870
do.	do.	1771
James McFadgion, Kennett,	do.	1953
do.	do.	1784
George Mansel, Kennett,	do.	1729
do.	do.	1638
Peter Plankinton, Kennett,	do.	1722
do.	do.	1704
Isaac Walton, New Garden,	do.	2065
do.	do.	1741
Moses Pennock, East Marlborough,	do.	2016
do.	do.	1877
David Brown, New Garden,	do.	1921
do.	do.	1725
Joel Pennock, West Marlborough,	do.	2324
do.	do.	2298
do.	do.	2503
do.	do.	2055
do.	do.	1820
do.	do.	1768
Jesse Pusey, East Marlborough,	do.	2086
do.	do.	2002
do.	do.	1855
do.	do.	1778
Cyrus Chambers, Kennett,	do.	3531
do.	do.	1761
Marshall Scarlet, Kennett,	do.	1700

We were boasting a little of the foregoing weights, as one of our Brandywine neighbors stepped in, who, after looking over the statement, handed us the following account of two cattle weighed on the West Chester scales, on Saturday last, and raised by Anthony Taylor, of East Bradford.

1st Ox,	2430
2d do.	2045

## COLUMBIA.

As an instance of the increased value given to property in this borough by the completion of the public works, we mention: that that part of "Old Columbia," known by the name of "Public Ground," has recently been leased for five years, for \$2035 per annum—or \$10,175 for the whole term. Last year the same property rented for about \$700.—*Co. Spy.*

From Poulsons American Daily Advertiser, of 29th Dec. last.

### INTERNAL IMPROVEMENT.

I observe in your paper of 26th December, instant, that "Mifflin" is very properly calling the attention of the members of our legislature, to the vast importance of rail roads; for vast it is, when the public have spent more than \$22,000,000 in canals and rail roads, and companies and individuals perhaps as much more, in our single state.

He gives the very extraordinary fact, of one locomotive called "The Arabian" running between Baltimore and the Inclined Plane, for fifty days, a distance of 82 miles, daily, with the Frederick train of passenger cars, making 4000 miles without repair, and that the expense of the locomotive was \$13 25 per day, a very extraordinary performance indeed, and fully justifies the favorable opinion the Baltimore public have long entertained, of the ability and performances of the officers of the rail road Company that they will do all that can be done, to make their rail road to the west beat our Pennsylvania Canals.

Suppose that in the place of the passengers mentioned, which would have weighed about 12 to 15 tons at a load, we assume that the locomotive drew a full burthen say of 40 tons, this multiplied into the distance 80 miles, is 41-100 cent a ton a mile, or if the load be only one way the cost would be 82-100 cent a ton a mile, as the cost of the current expenses of the locomotive only.

I have recently obtained the following facts of the performance on a Pennsylvania canal. One of the contractors, for boating coal on the Lehigh canal, did the following work with one boat and one old mare.—The boat cost about \$230 and the old mare cost \$25 00.

14 trips from Mauch Chunk to Bristol or back is	212 miles, —	2,968
1 trip from do do to Brunswick and back is		\$18

Total 15 loads of 50 tons each—and total distance,	3,286
--	-------

I further understand that during this time, the boat required no further expense than a little caulking, which was done by the hands, and the old mare required no other repairs than food and a little shoeing.

That the reason for not making more trips, was owing to the detentions at unloading from 3 to 9 days a trip, in consequence of the wharves being so full of coal, and there not being room for the boats to get up to unload.

That when there is no detention, the boats frequently make a trip to Bristol and back to Mauch Chunk in nine days.

Suppose we allow a trip to be made in ten days, with the old mare, and that the cost of her ladyship, and the boat, was sunk in one season, of 250 days (those boats have now lasted several years, and none as far as we have understood are unseaworthy) yet the cost would be as follows:

A man a day,	90 cents.
1 do do	80 "
1 boy do	50 "
The mare cost \$25 00, divide in 250 days,	10 "
Horse keeping,	50 "
The boat cost 250 dollars, divide in 250 days, is a day,	100 "
Tow lines and contingencies,	20 "
	<hr/> 400

And a trip of ten days	\$40 00
106 miles Mauch Chunk to Bristol	
+50 tons is —	53 00

\$40 00 ÷ 53 00 = 75-100 cents a ton a mile, and return empty, including the whole cost of the old mare, and boat,—whereas the cost of the locomotive only, is 82-100 cents a ton a mile, by having also no back load.

From the foregoing I presume our Baltimore neighbors will have to manufacture another "Arabian" for their rail road before they beat the "Old Mare" on our Canals.

### A PENNSYLVANIAN.

P. S. The old mare cost 25 dollars and four of them will do the work of one locomotive "The Arabian" cost 5000 to 6000 dollars.

From the Mauch Chunk Courier.

### INTERNAL IMPROVEMENT.

I perceive by the Governor's Message that we have all the State Improvements, that have been under contract, either entirely finished, or sufficiently so, as to use them throughout their whole extent.

That the state has now 601 miles of canal, and 110 miles of rail road, making a grand total of 720 miles, and that the cost thereof has been 22,114,915 dollars.

I also learn that the principal part of this sum has been expended to connect our great commercial metropolis with Pittsburg, so as to secure to the State the great thoroughfare for the trade of the *Far West*.

Pittsburg appears to be from Philadelphia 435½ miles, via the Schuylkill and Union canals, or 395½ miles by the Columbia rail road; and from the amount of business done this season on this line, and the disposition apparent to get into this transportation business, I hope and trust the public will realize their best expectations from these splendid improvements, both commercially and politically; for mankind are generally friendly to each other when it is their interest to be so, and nothing improves this feeling better than frequent interested intercourse. I find however on looking into the Baltimore and Ohio rail road company's report of last October, that they calculated on intercepting the current of the great Western trade from Pennsylvania by means of their rail road, which they say makes the Ohio river but 301 miles from Baltimore, and that as (they say) rail roads are more economical for transportation than Canals, and this added to their advantages in distance, *will insure them this great western trade*.

On examining their rail road report; and perceiving in it their expectations of supplanting us, I have been induced to examine other reports of the actual expenditure in transportation, both by canals and rail roads—*not what they theoretically ought to spend, but what they have actually spent*; for I have long since learned, that an ingenious mind, was not at a loss to spin out a pretty theory on any subject; *but that practice, was a very different thing*. In the pursuit of this inquiry, I have obtained all the regular reports of the justly celebrated Manchester and Liverpool rail road Company, from their commencement, excepting one. This collection of reports must go far to settle the great question between canals and rail roads, so far as economy in transporting tons of produce, &c. is concerned, as that company is one of the oldest, operating by the modern improvements. They have had the command of abundance of money, and left nothing that ingenuity could suggest, or money procure, to produce the very best effects. Their business has also been large, and last, not least, has been productive from the beginning.—Consequently they have no object to disguise facts; and so far from disguise, they go into minute details, of all their expenses.

I give below, extracts of all that appears to affect us, and also an extract from the Baltimore report of the same heads, together with what has been paid for trans-

portation the past year on the Schuylkill, Lehigh, Delaware, and Delaware and Raritan Canals.

Extracts from the Semi-Annual Reports of the Manchester and Liverpool rail road Company.

	Number of passengers transported.	Cost of each passenger per mile in cents.	Number of tons of goods transported.	Cost of each ton of goods per mile in cents.	Cost of Locomotive per ton of goods a mile in cents.
For the half year ending					
June 30, 1831.	188,726	1,5	42,692	5,6	1,3
December 31, do		1,5		5,9	1,4
June 30, 1832.	174,122	1,85	57,881	5,7	1,16
December 31, do	182,823	1,93	86,842	4,86	0,9
Dec. 31, 1833.	215,071	1,7	98,247	5,1	1,16
June 30 1834.	209,656	1,9	104,356	5,13	1,16
This Com. charged for last term,	3,72			9,33	

NOTE.—All the power along the road is locomotive engines.

Extract from the Annual Report of the Baltimore and Ohio rail road company ending Sept. 30, 1834.

Passengers transported.	cents a mile.	tons trans. a mile.
94,844	1,98	56,119
This Co., charged for the last year;	3,	19,928
		36,191
		6, 2 going W.
		4, 5 going E.

NOTE.—All power for passengers, locomotive engines, and for goods, horses.

Schuylkill Navigation Company paid this year for transporting coal 1 cent a ton per mile.

Lehigh Delaware, and Delaware and Raritan canals paid this year for transporting coal 103,000 tons. cents. 80-100

The contractor finding every thing except paying the tolls.

The above extracts require but little comment to satisfy the good citizens of this state, that they need not fear losing the public money expended in their great improvements.

It must be recollected that on the rail roads mentioned, they have a large transportation both ways; whereas the coal by the canals goes only one way, and those prices are predicated on the boats returning empty. If the trade was like that on the rail roads, it would no doubt reduce the cost at least *one third*. But taking things as they are, no doubt in a few years, when we have business on our canals, the State, whose interest will be that of the citizen, will come down as low with their tolls as will keep their works in repair, and pay interest on their loans—and come within a price, that toll and transportation together need not exceed the mere cost of the Locomotives on the rail road.

It is fair to presume that the cost of the locomotives in this country can never be less than of the Manchester and Liverpool rail road, after so many years experience, under circumstances not to be excelled in any country. They have coal for fuel on or by the line of their rail road. They had 22 locomotives on their road so early as 1832. Hence their experience is very great. Wages there, are not half what we have to pay, and iron there is less than half our prices; and this forms a large item of expenditure.

But let us examine a few of the items constituting the cost of transportation on canals and rail roads, as-

suming as a basis that a horse or mule will travel an equal distance (giving them their proper gait) before wearing out, with a locomotive engine, and that a canal boat and rail road car will also last to go an equal distance before wearing out.

I presume most persons will agree with me that the animals and the boat will both go further to wear out, than the locomotive and cars. I have been told by persons in the employ of the Lehigh Company, that some of their boatmen have already paid for their boats bought of the Company, by paying ten dollars a trip to Bristol and back, and that during this time they have not spent ten dollars on their boat. And mules, it is believed, will last to work from 20 to 30 years.

One horse on a canal hauls 50 tons cargo, and goes 20 miles a day, and costs \$100. Hence 4 horses draw 200 tons, 20 miles a day, being equal to *fifty tons, eighty miles a day*.

A Locomotive draws from 30 to 50 tons cargo, and goes 80 miles a day, and costs from \$5000 to \$6000 each.

Then to effect equal purposes for the propelling power on a canal,

4 horses \$100 each, cost \$ 400  
On a Rail road 1 Locomotive cost from 5 to \$6,000

A boat on the Lehigh canal completely covered in carrying 70 tons cost \$ 300

23 cars for Rail road at 3 tons each, is \$2,300  
69 tons at \$100 to 120 each (say 100)

Hence the Locomotive power on a canal is but *one-thirteenth* the cost of the Locomotive on the Rail road; and the boat on the canal but *one-seventh* of the cost of burthen cars on the Rail road.

In reference to the durability of the two, the canal is always growing better, while the Rail road (whether used or not used) is continually getting worse.

A PENNSYLVANIAN.

For the Gazette and Intelligencer.

### THE WEATHER.

Yesterday (Sunday the 8th Feb.) was the coldest day we have had in Philadelphia this winter. The same thermometer, having a southern exposure and located near the corner of Walnut and Seventh streets, which stood on Monday the 5th of January, the coldest day of the cold week, at 3 degrees above zero, stood at 7 A. M. at *one degree above*. The day throughout was windy, and perhaps fewer people were seen in the streets, than on any day within recollection.

In our last paper, we stated the thermometer on Saturday at 7, A. M., to have been at 18°. It rose in the middle of the day, but fell rapidly in the afternoon. As 11, P. M. it was at 6½. Its course yesterday was pretty much the same.

At 10, A. M. it rose to 10.]

At noon it was at 20.

At 2, P. M. it was at 23½.

After that it began to fall.

At 3, P. M. it was at 20.

" 4, " " 16.

" 5, " " 12½.

" 6, " " 11.

" 7, " " 10½.

" 8, " " 9½.]

" 9, " " 9.

This morning at 7 o'clock, it was 6 degrees above zero, being five degrees milder than yesterday.

The river is again closed opposite the city. The ice boat of the Philadelphia and Amboy rail road cut through the ice and crossed this morning.

The Schuylkill and Delaware Rivers have been closed all this week—and are now closed, (13th)

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

V . XV.--NO. 8.

PHILADELPHIA, FEBRUARY 21, 1835.

No. 372.

## JUDICIAL HISTORY.

JUDGE BAIRD AND THE BAR.

The following correspondence and proceedings have created considerable excitement in the west,—and being of a novel character, and rather of public than personal or private nature, we have thought best to preserve them, as a part of the judicial history of the State.

From the Genius of Liberty.

FRIDAY, SEPT. 12, 1834.

Gentlemen:—

You have, no doubt, long been aware that the occurrence of a variety of disagreeable circumstances in the conduct of our business in court, has rendered my situation often exceedingly painful and perplexing. It is possible I have had my full share of the causes, which have led to this state of things. I think however upon reflection, you will be satisfied that in a great degree it has been owing to the irregular manner of the bar in the trial of causes. It is unnecessary to go into particulars at this time. It has been the subject of complaint and of conflict, distressing to me and unpleasant to you. Finding a remedy hopeless without your aid, I have frequently brought my mind to the conclusion, that perhaps I ought to withdraw and give you the opportunity of getting in my room some other gentleman who would have your confidence and co operation. This determination has heretofore been yielded to the advice of friends upon whose judgment I have relied. Early in the present week I requested an interview with you, that we might talk these matters over, and perhaps agree in an united effort for reform. You were prevented from meeting as proposed. In the mean time the occurrence of a brutal attack upon me by a ruffian, growing out of a trial in court, has more and more convinced me of the necessity of coming to some conclusion, that may prevent the repetition of such outrages. On this subject I wish not to be misunderstood. The act of a brute, or bully can never drive me from the post of duty or of honor, I thank God that in the performance of my official functions, I have been preserved from the operation of fear as I hope I have been from favor or affection. I never repeat have been deterred by an apprehension of personal danger, although I have been aware of peril. I have known that there was cause for it. The inadvertent—but as I think indiscreet indulgence of side bar remarks, indicative of dissatisfaction with the decisions of the court, and perhaps sometimes of contempt, have been calculated to make a lodgement in the public mind injurious to the authority and respectability of the court, and particularly of myself its organ, and has had a direct tendency to rouse the malignant passions of a disappointed or defeated party: I have often observed or been informed of these things, and thought they might lead to disastrous consequences. A correct judicious man, if he thinks his case had not been correctly decided, will seek redress in the legitimate mode only, or if that is not accessible will submit to it, as we all do to unavoidable misfortunes, a ruffian how-

ever, if told by his counsel that injustice had been done him in the administration of the law, may feel disposed to seek revenge on the judge. In the case referred to I think the *cause* and *effect* can be distinctly traced.—The earnestness and positiveness of the counsel in this trial, and expressions thoughtlessly dropped afterwards perhaps inflamed an unprincipled fellow to make the attack. It may be however that it would not have occurred, had he not been encouraged by other persons. I have only my suspicions, and make no charge against any one, I exculpate the whole bar from the most distant idea of producing such a catastrophe. All that I mean to say is, that the practice I have mentioned has a direct tendency to incite such outrages, and that in this particular case (in connection with other causes) it did lead to the violence. The same cause may produce the same effect. I must be always exposed to such consequences if matter of excitement continues to be furnished to wrong headed brutal suiters. If I could have the confidence and support of the bar, and the assurances of a change in their manner towards each other, the office I hold would be rendered dignified, honorable and pleasant, but otherwise it must be altogether intolerable. On my part there is no want of good feelings, and I take this occasion to declare, that there is not one of you for whom I entertained unkind sentiments. On the contrary there is no one whose interest I would not advance, or whose honor I would not maintain so far as in my power. As to myself I have no right to claim your friendship though I should be glad to have it, but I think in the discharge of my official duties, I ought to have your courtesy and respect, and when I err, forbearance in manner and recourse directly to the proper remedy (which I am always disposed to facilitate) and not to inflammatory expressions, or disapprobation or contempt addressed to the public or the party. I have thus disclosed to you frankly my feelings and views. In reply I wish your sentiments and determinations as to the future in relation to the grievances I have presented and propose therefore that you should take a few minutes to confer together and inform me of the conclusion to which you may arrive.

I am truly yours, &c.

T. H. BAIRD.

UNIONTOWN, Pa. Oct. 3d, 1834.

Dear Sir:—

We have delayed replying to your letter, under date of the 12th September, 1834, addressed to the members of the bar of Fayette county, until the present time, to afford an opportunity for consulting together, and also for mature reflection upon the matter to which you refer. We regret in common with your Honor, that we have not been able in harmony and with satisfaction to ourselves and the people of the county, to transact the business of our courts. The public confidence seems to be withdrawn alike from the bar and the court. Perhaps your Honor's retiring from the bench, as you have intimated a willingness so to do, and giving the people power to select another, would be the means of producing a better state of things, and a more cordial co-operation from all sides in the des-

patch of the business of the county. This expression of our views is made in candor and sincerity, without a wish to inspire one unpleasant thought or unkind feeling; but under a sense of duty to the county in which we live, to your honor and to ourselves.

Very respectfully,

Yours &c.

JOHN M. AUSTIN,  
JOHN DAWSON  
JOSHUA B. HOWELL,  
JOHN H. DEFORD,  
JOSEPH WILLIAMS,  
ROBERT P. FLENNIKEN,  
RICE G. HOPWOOD,  
WILLIAM McDONALD,  
WILLIAM P. WELLS.

HARLEM, Dec. 15, 1834.

Messrs. Austin, Dawson, Howell, Deford, Williams, Flenniken, Hopwood, McDonald and Wells, members of the Fayette County Bar.

Your communication dated 3d October (post marked Nov. 7th,) which purports to be an answer to my letter of 12th Sept. came to my hand on Saturday night last. It had been withheld from me by my friends during my recent illness, from an apprehension it might produce an increased excitement prejudicial to my health. In this they were mistaken. I have experienced too much of the ills of life, and have at present too many causes of agitating concern to be greatly disturbed by it.—Perhaps were it not for the knowledge of human nature which I have dearly bought, I might have been surprised and pained to receive such a paper from persons standing to me in the relation that you do. Not one of whom I have injured in thought word or deed. I was, however, prepared for such an “*expression of your views*,” though there are some signatures I did not expect to see. Had your letter been framed immediately in answer to mine, and put into my hands at the time, I do not know what course I might have adopted in the hurry of my feelings. I certainly have often entertained the thought of leaving my situation, influenced by a regard to my personal comfort—and I will add also, from considerations towards you, that spring more from my heart than my head. This purpose I have often yielded to the judgment and advice of friends.—I have also repeatedly said that unless a reform could be effected in the mode of doing business in court, I would not continue in office. Immediately after the commencement of the last term, to which I referred in my last letter; I hastily expressed my intention never to return to the County. This purpose was not formed on account of the immediate outrage, (which I was aware I could sufficiently punish,) but because I believed (as I still do) that the ruffian was instigated by others. It is not in my recollection, that I declared in my communication to you, any present design of abandoning my office at your request, and I am confirmed in this idea, from the fact that a judicious friend strongly remonostrated against such an intimation being given. But if I had even so expressed myself, subsequent reflection, long before I received your letter had abundantly convinced me that it would be wrong to do so at this time, and under the circumstances in which I am placed in my official relation to you and the people.—The station I hold is not mine—nor is it yours. It belongs to the public, and has been conferred upon me (without my solicitation,) by the constitutional agent. Unless from private consideration I think proper to give it up, (and the right to do so is recognized by law,) it cannot be taken from me, but in the way the people have designated. It would be a violation of *their rights*, and a dereliction of duty, if I could be constrained or influenced to abandon it by any other process. I am now satisfied that I ought not to have addressed you as I did. It was compromising the dignity of the office

entrusted to me, to *solicit* from you a *reform* in your manner of conducting business at the bar, when I ought to have *compelled* it. In concurrence with my brother Judges I should have prescribed the order and discipline of the Court and enforced obedience. This error, however, also proceeded more from my heart than my head,—and you are the last persons in the world who ought to complain of it. Henceforth it will be my endeavor to correct this mistake;—and depend upon it, if there is not a *reform*, without making it a matter of *compact* with you, it will not be my fault.—But, however I might be disposed to resign my office from motives of private convenience and peace of mind, (which I have a right to do,) or perhaps from a wish to indulge you in a desired preference for some other person in my stead, (the propriety of which I now doubt) yet still, the terms of your communication entirely preclude me from doing so without yielding my personal and judicial honor. You undertake to assert that “*the public confidence seems to be withdrawn alike from the Bar and the Court.*” If the first part of the proposition is to be understood as an *admission* of the state of things in relation to yourselves, it is not my business to combat it;—but I deny your right or warrant to make the latter allegation. It is of grave import and deliberately set forth, for you took time as you say, “*to afford an opportunity of consulting together, and also for mature reflection.*” It is the basis of your request, that I should resign; for the other matters in relation to the manner of conducting the business of the Court, you were well aware it was in your power to adjust; Undoubtedly, therefore, it involves a charge of *official delinquency*;—such as would warrant the removal of the judges either by impeachment or address.—“*Public confidence*,” is indeed the only foundation on which can rest the usefulness, respectability and authority of the Courts. If that is destroyed, all that is valuable in our judicial institutions must fall, and the personal honor of the judges be involved in the general ruin. To weaken or impair then, that *faith* which the people ought to have in the integrity and capacity of those who administer their laws, is a great *public mischief*. Certainly there is no way more calculated to produce such a result, than to assert that *such is the present fact*. The laws will not allow, that the people have “*withdrawn*” their “*confidence*” from their judicial agents, unless, it has been so ascertained in the mode prescribed in the Constitution. It cannot be tolerated, that the official standing of judges is to be tested by the sneering remarks we may hear in the streets, or the vituperation of bar-room censors. I leave it to you therefore, as a matter of professional opinion to say—whether it would not be *indictable* as a *libel*, for any one to publish in writing, that the “*public confidence is withdrawn*” from a Court. Perhaps when members of the bar so far forget the “*fidelity*” to which they are bound, as to promulgate such a declaration, a discreet but decisive exercise of the summary power vested in the judges, over the conduct of their own officers may be considered the most obvious and proper course. On this point it would be premature in me to express an opinion now. Your communication will be before us at the next term, and after deliberate examination, and hearing the decision of the Court will be pronounced. There is another matter which I think it proper to apprise you of, with the hope that a satisfactory explanation will be offered. I have understood that a report is in circulation emanating from some of you, that I have charged the *whole bar*, with being concerned in the outrage lately committed upon me—if it is true that such an idea has been thrown abroad, it is so base a perversion of language that I cannot conceive the malignity of the heart that could engender it. When such means are employed to excite popular prejudice, it would not be surprising if “*public confidence*” should be “*withdrawn*”—from *me* at least. My letter will show for itself—and I defy the ingenuity of Satan him-

self to make out any such thing—on the contrary I think it contains a distinct “*exculpation of the whole bar from the most distant thought of producing such a catastrophe.*” The whole matter in relation to that outrage, will be before the Court at the next term—and the associate judges will be called upon to sustain, the violated authority and dignity of the judicial office by the exercise of their summary power of punishing such gross contempt. At the last setting, I made up my mind to take no step myself, as it might be thought I acted under excited feeling; and the public prosecutor, who is considered as particularly representing the people in relation to such things did not think proper to present to the Court the propriety and necessity of this course. It is however indispensable! for a judicial tribunal that cannot protect itself, without resorting to another tribunal for aid or redress, must cease to exist.

In conclusion, I will only say, that upon mature reflection it is my determination *not to resign at present*; and that it is my determination *never to resign upon the ground stated in your letter.* I hope to be able to take my seat on the bench in Fayette county, on the first Monday of January next. If I have lost any degree of the public confidence, it shall be my endeavor to regain it, by a faithful performance of my judicial functions. With the aid of my brother judges, I will try to preserve the order and discipline of the Court, by a discreet but energetic exercise of the power which the law gives us; and perhaps you may be satisfied that the *laziness*, which has no doubt, been a considerable cause of complaint, was more owing to my kind feelings towards you, than to any want of moral courage to encounter the consequences that may result from the honest discharge of public duty; I shall perform my official functions, with sincere desire to do *right*—and I shall expect from members of the bar, that they “*behave themselves with all good feeling to the COURT as well as to the clients.*”

I am, &c.

T. H. BAIRD.

## PROCEEDINGS IN COURT.

JANUARY TERM, 1835.

Thomas H. Baird, President Judge, and Charles Porter, and Samuel Nixon, Associate Judges.

On Tuesday the 6th day of January Term, a rule was granted upon John M. Austin, John Dawson, Joshua B. Howell, J. H. Dedford, J. Williams, A. Patterson, R. P. Flenniken, R. G. Hopwood, Wm. McDonald, and Wm. P. Wells, to show cause why they should not be stricken from the list of Attornies, &c., see letter filed.

[*Extract from the minutes.*]

Wednesday, Jan. 7.

On the next morning (being Wednesday,) the members of the bar presented to the Court, the following:

“The undersigned who are required by a rule of Court, entered to show cause why they should not be stricken from the list of Attornies, present this their answer to that rule:—

We earnestly, but respectfully protest against the legal power and authority of the Court, to enter, and enforce such a rule, for the cause alleged.

The rule appears to be founded and predicated on the letter of the undersigned, addressed to Judge Baird, dated October 3d, 1834. To enable a full understanding of the whole matter, a letter of Judge Baird, dated September 12th, 1834, is herewith presented (See letter.)

It is evident that the letter of the undersigned, which contains the supposed offensive matter, is a reply and response to the letter of Judge Baird, to them addressed. It is certainly respectful in its terms, and, *as is sincerely believed and positively asserted*, contains neither in word, meaning, nor intention, the slightest con-

tempt, or the least disrespect to the Court, or any of its members.

The respondents would be entirely at a loss to comprehend how it could be possible to give the letter, from its terms, an offensive interpretation, were they not informed from another source, that the following paragraph, is considered objectionable, “*The public confidence seems to be withdrawn alike from the bar and the Court.*” We by this paragraph expressed our honest conviction, and, *intended no contempt to the court.* It is a response in some measure to that part of Judge Baird’s letter, in which he himself says, that the circumstances to which he refers, “*were calculated to make a lodgement in the public mind, injurious to the authority and respectability of the Court, and particularly of himself its organ.*”

It will be perceived from the two letters referred to, that the correspondence did not take place between the bar and the Court—it was between the respondents and Judge BAIRD, at his instance and request. The occurrence asserted as constituting some undefined offence, did not take place in presence of the Court—it took place out of the Court and *in pais*.

Far, very far, therefore, are we from being guilty of an offence against the Court. As to Judge Baird personally, the letter distinctly and unequivocally states, that our views were “*made in candor and sincerity, without a wish to inspire one unpleasant thought or unkind feeling.*”

JOHN M. AUSTIN,  
JOHN DAWSON,  
JOSHUA B. HOWELL,  
WM. P. WELLS,  
ALFRED PATTERSON,  
J. H. DEFORD,  
WM. McDONALD,  
J. WILLIAMS,  
R. P. FLENNIKEN,  
R. G. HOPWOOD.

This answer having been read, it was pronounced by the Court as insufficient, because it did not embrace the publication of the Correspondence. The respondents then asked the rule to be postponed until the afternoon, when they would make answer to that part of the supposed offence also—which was granted.

In the evening the respondents presented the following as their second answer:

The undersigned, after reiterating the protest contained in a former answer, make this further reply to the rule entered yesterday against them.

When the former answer was prepared it was not known that the publication of the correspondence between the bar and Judge Baird in the newspaper constituted a portion of the supposed offence against the Court; the record not presenting that aspect of the case.

They now reply to this matter, and to cause a more perfect understanding thereof, they present herewith a letter from Judge Baird to the undersigned, dated December 15th, 1834. We now ask that the three letters on record may be carefully examined in connection with our former answer to the *Rule to shew cause.* We cannot but think that the court will then be satisfied, that the last letter of Judge Baird contains imputations and strictures not warranted by any thing said in our communication to him, when properly understood. In some way the existence of the controversy reached the public ear. It immediately assumed a false shape in connection with an assault committed upon the Judge by a suitor in court. Misapprehensions about the nature of the correspondence were produced. For want of correct information, false assertions were made, and false inferences drawn. It became a peculiar matter involving seriously public interest. The correspondence related to public affairs. The latter by no means being private or confidential, we considered

it our imperative duty, in justice to ourselves, and in justice to the public, to lay the whole correspondence, as it really was, before the whole community. It was accordingly done, and for the purposes intimated. The court will clearly perceive that in this act there was no offence committed against the court, but was a proceeding rendered every way necessary, as it gave the true state of the controversy, and supplied the place of false rumours in relation both to Judge Baird, and ourselves.

JOHN DAWSON,  
JOHN M. AUSTIN,  
WM. P. WELLS,  
JOSHUA B. HOWELL,  
J. H. DEFORD,  
J. WILLIAMS,  
R. G. HOPWOOD,  
A. PATTERSON,  
R. P. FLENNIKEN.

William McDonald not concurring with the majority of the respondents, in the views taken in their second answer, presented a separate one as follows:—

On the subject of the difficulty between the bar and the Court, I take the liberty of making the following statement. I was opposed to the publication of the correspondence from the beginning, and have frequently so expressed myself, thinking it would have a tendency to widen the breach, without being calculated to do any good. From first to last, I have been free from the control of any intention to cast disrespect or contempt upon the court or any of its members.

WM. McDONALD.

The court then adjourned—it being understood judgement on the rule was to be pronounced the next morning. In consequence, however, of various delays this was not done until the evening, when the judgement of Baird and Porter was delivered by Baird as follows:

Jan. 8th.

The court has given to the papers presented by the respondents in this case, the most careful consideration, and the most favorable construction their import would at all admit. It is with the deepest regret, we are constrained to say, that they are by no means satisfactory. We cannot regard them as removing the offensive and injurious operation of the matter which has been published to the world in relation to this court, and which forms the gravamen of the rule. All that we have required, is, that the gentlemen would distinctly place in their answer a disavowal of any intention to impute to the Court or its members, any thing which would lower them (in their official character) in the esteem and confidence of the people. This has been, and is still refused. No alternative therefore remains. We must abandon our judicial honor, respectability, and authority—or endeavor to sustain them in what we conceive to be the legitimate mode.

It is not the common laws or statutory power to punish contempts, which we are about to exercise. It is the coercive control and discipline which the courts have legally employed, in order to preserve in the members of the bar the observance of that trust, courtesy and respect, which is indispensable to the safe and orderly administration of justice. An early act of Assembly (22d May, 1722) declares that attorneys if they misbehave, shall be liable to “suffer such pains, penalties, and suspensions as attorneys at law in Great Britain are liable to, in such cases”—and by an act of last session, “If any attorney shall misbehave himself in his office of attorney, he shall be liable to suspension, removal from office, or to such other penalties as have hitherto been allowed in such cases by the laws of this Commonwealth.”

By these three acts, then, the power of the courts

here, is the same as is exercised by the courts in England. We consider it unquestionable, wherever there is “misbehaviour” in an “attorney.” The exercise of this power is a judicial act, and although it is *summary* yet it can no where be so safely lodged, both as respects its prompt and efficient application when necessary, and also as respects the security and interests of the members of the bar, who have always the feelings and attachment of the judges with them, when they conduct themselves with propriety.

The term “misbehaviour” in our acts of Assembly, has an evident relation to the official oaths of an attorney. He is sworn to “behave” himself, “with all good fidelity to the Court, as well as the client.” What does this include. As between *counsel and client*, it seems to be well understood. A lawyer would not betray the *interests or the fame* of the man who has given him a paltry fee; nor would the law allow him to do so in any case in which he is engaged. Does it not import *any thing* as respects the court? Can an attorney be tolerated in publishing to the world that “*public confidence is withdrawn from the Court*,” and then come in and claim to stand in that relation which the law contemplates as essential to the decorous, orderly administration of the public business. If so, we do not understand the meaning of the word “fidelity,” or the relation it creates.

In this case we think there has been “misbehaviour” on the part of the gentlemen, against whom the rule was granted.—The publication in relation to the Court we consider a libel. It has been done in the office of attorney’s, as they themselves show. The whole matter refers to the public relation between the court and the bar. The first letter of the president is in truth the act of the whole court, for although signed by him, it was with the concurrence of his brother judges. It was intended as a kind appeal to their good sense, and generous feelings, and in no wise insinuating any imputation more than occasional inadvertent side bar remarks, and other irregularities, as the letter plainly imports. It was communicated in a private manner, because it was thought more likely to produce a good effect, than a public address. They, in all their proceedings, and in their answers, speak of it in their official relation. The only question then, is, does their conduct amount to “misbehaviour?” and to what degree? We think it does, and to such an extent of aggravation as virtually to destroy the relation of “fidelity” which must exist towards the court, by the members of the bar. If that relation is extinguished, and no longer exists, the official connection must necessarily be dissolved, otherwise the spirit of the law is violated.

As we have no personal feelings to indulge (except those of regret) we forbear any harsh commentary upon the matters involved. We would leave it to the calm reflection, and better feelings of the gentlemen themselves, and would hope that they may be induced to avail themselves of the door which is still open to a returning sense of duty. We have no appeal to make to the public, except what a just estimate of our rectitude of purpose may present to their virtue and good sense.

It is ordered that the names of John M. Austin, John Dawson, J. B. Howell, W. P. Wells, Alfred Patterson, John H. Deford, J. Williams, and R. P. Flenniken, be struck from the list of attorneys of this court; and in the case of Rice G. Hopwood the rule to be continued.

In the case of William McDonald, the rule to be discharged.

Judge Nixon dissented from the majority of the court, and presented the following opinion in relation to the case:—

I concur with my brother judges, that certain parts of said publications are calculated to bring this court into disrepute with the people, and ought to be pun-



ished; but taking into consideration the cause that elicited, or drew forth these publications, and the concessions and explanations that have been made by the respondents to the court, the penalty of an indefinite suspension would be very severe. Had our rule been left open, so as not to require a specific punishment, I would have been very happy in co-operating with my brother judges in inflicting some adequate punishment, if any, but as there is no alternative, I must dissent from their judgment, and think the rule ought to be discharged.

January 9th.—Judges Porter and Nixon on the bench.

Rice G. Hopwood, in whose case the rule was postponed to this date, presented the following answer:

In answer to the rule granted by the court upon the members of the bar, to show cause why they should not be stricken from the list of Attorneys, the undersigned, candidly, but respectfully, submits the following reply as to the publication:

That he intended no contempt of court, nor did he intend to call in question in any shape, the integrity of their official conduct, or detract from their standing in the estimation of the public.

RICE G. HOPWOOD.

Rule discharged.

On the second page of to day's paper, will be found the correspondence between the Hon. Judge Baird and the members of the bar of Fayette county, with a copy of the record of the proceedings of the Court thereon. On perusal, it will be seen that the correspondence is not between the Judge and members of the bar, as individuals, but between the Judge as the organ of the Court, and the members of the bar in their character of Attorneys; and that the whole correspondence has relation to the transaction of business in Court.

In consequence of this matter, petitions are in circulation in Fayette county, praying for the impeachment or removal, by address, of Judge Baird. Now it strikes us that the proper mode for those members of the bar who have been stricken from the list of attorneys, to obtain redress, would be to take an appeal to the Supreme Court from the decision of the Court of Common Pleas, and if they succeeded in obtaining a reversal of the judgment, they would be immediately reinstated in their office of attorneys, as a consequence of the reversal. In declining to take this course, they tacitly admit that the law upon the facts of the case is against them. We, therefore, hope the people of the 14th Judicial District will not lend the sanction of their names to the petitions which contemplate the removal of Judge Baird by impeachment or address.—*Wash. Reporter, Jan. 20.*

FOURTEENTH JUDICIAL DISTRICT.—At a meeting of the members of the Bar of Washington county, held at the Prothonotary's office, on Saturday the 17th inst. the following proceedings were had.

Whereas, it has been ascertained by the members of the Bar of Washington county, constituting a part of the 14th Judicial District, that petitions are in circulation in certain portions of said district, for the purpose of procuring the impeachment or removal of Judge Baird. Therefore—

Resolved, That we, members of the Bar of Washington county, do hereby declare our entire confidence in the judicial uprightness and ability of the Hon. Thomas H. Baird, President Judge of the 14th Judicial District of Pennsylvania, and cheerfully bear attestation to his industry and efficiency in the discharge of his official duties.

John H. Ewing,  
B. S. Stewart,  
A. G. Acheson,  
Geo. W. Acheson,  
S. McFarland,

John L. Gow,  
Wm. K. McDonald,  
R. H. Lee,  
James Watson.

WASHINGTON, Pa. 13.

Stevens who committed the assault on Judge Baird, appeared at the last term of the court of Fayette county, plead guilty, and was sentenced to undergo an imprisonment in the jail of the county for the term of one year, to pay a fine of fifty dollars and costs of prosecution, and to enter into a recognizance of \$1000, with two sureties each in the sum of \$500 more, to stand committed until this sentence be complied with.

## HISTORICAL NOTES.

By REDMOND CONTINGHAM.

Turn to page 517 of votes of Assembly, volume 4th.

Extracts: "The Nation of Indians called the Shawanese and Southern Indians who being rendered uneasy by their neighbors, came up to Conestoga about the year 1698, making about sixty families, and desired leave of the Susquehanna Indians, who then lived there, to settle on that river. That these Susquehanna Indians applied to this Government, that the Shawanese might be admitted to settle, and that they would become answerable for their good behaviour. That the first Proprietary, William Penn, Esquire, arriving soon after this transaction, the Chiefs of the Shawanese and Susquehanna Indians came to this city, and renewing their said application, the Proprietary agreed to their settlement, whereupon the Shawanese came under the protection of this Government. From that time, great numbers of those Indians followed them, and settled on the Susquehanna, and the upper parts of Delaware. That as they had joined themselves to the Susquehanna Indians who were dependant on the Five Nations, they thereby fell also under their protection."

From the Report made to the Hon. Robert H. Morris, Esquire, by the Council.

ROBERT STRETTEL,  
JOSEPH TURNER,  
THOMAS CADWALLADER.

Philadelphia, Nov. 22, 1755.

NOTE:—"The original manuscript from which the report was printed in the Votes of Assembly, contains the true figures 1678.

The manuscript is in the office of the Secretary of the Commonwealth."

In the Report as printed, there are two very important errors. The first is the date 1698, instead of 1678. This error easily appears, for in the same report it is stated that William Penn arrived after the transaction; as William Penn arrived in 1682, this could not happen. But the manuscript in the office of Secretary of the Commonwealth show that about sixty families of Indians who were disturbed in their possessions in Carolina in the year 1678, obtained a resting place at the mouth of the Conestoga. Thus this difficulty is removed.

Gordon in his History of Pennsylvania, page 514, says "the Shawanese had retained permission to settle in the Province in 1698," the figure nine being inserted instead of seven in the votes of Assembly, probably led him into the same error

The next error is the following—"the Chiefs of the Shawanese and Susquehanna Indians came to *this city* and renewing their said application." It might be naturally inferred from the words to *this city*, that the Great Treaty was held in Philadelphia, but the Council only state that the Chiefs came "to this city," meaning Philadelphia, but do not mention where the Indian Conference was held. It follows, however, that if the treaty was not made in Philadelphia, it was made in its immediate vicinity, and there was no place so well suited for that purpose at that time, as Shackamaxon. Big Beaver who mentioned this particularly in 1753, establishes the fact. The reason why the speech of Big Beaver does not appear in the printed account of the Treaty made at Carlisle, is explained on page 528 of the fourth volume of the votes of Assembly, "because it was thought to relate more particularly to the Proprietary than to the Province."

Teedyuscung referred to the Treaty at Shackamaxon. Shingas in a speech, relates the same occurrence.

The reason why the "Minutes of the Indian Conference in relation to the Great Treaty made with William Penn at the Big Tree, Shackamaxon, on the fourteenth of the tenth month, 1682," cannot now be found, may be explained, "because they were thought to relate more particularly to the Proprietary than to the Province," and therefore were kept among the private papers of the Proprietary.

I again refer to the letter of Andrew Montour, dated in June, 1756, and to the "Tuscarora War Fires," where references were made to the Treaty held at Shackamaxon, by the principal Indian Orators, also to the letter of George Croghan, dated Philadelphia, Dec. 13, 1756, to William Denny, Esquire, Governor. I have given references which readily can be had to substantiate that Indian families removed from Carolina in 1678, and settled near the mouth of the Conestoga—also from Virginia in 1677, and settled on flats on the Susquehanna.—The speeches of Indians at several Conferences referring to the Treaty at Shackamaxon.

I have not depended on traditions, but have examined the early histories of the Southern Colonies, and the papers in the office of the Secretary of the Commonwealth, and thus have been enabled to detect error and remove doubts.

#### HISTORICAL NOTES.

In the year 1676, during the rebellion of Nathaniel Bacon in Virginia, a number of Indian families fled for security to the Susquehanna. These Indians were known in Pennsylvania by the name of Shawanese or Southern Indians.

Reference to the Treaty with the Indians in 1722, also in 1729.

It was not uncommon for the Indians to compare the condition of their Nation to a Tree.

Extract from a speech of a Conestoga Indian in 1732.

"As the Tree put forth its leaves in the Spring, so our women plant the corn while we fish, and as the tree increases in strength and branches, so our youth as

they become men, increase the strength and force of our Nation."

I would refer to Gordon's History of Pennsylvania, for further particulars in relation to the Great Treaty made with William Penn on the fourteenth of the tenth month, (December and not October) 1682, with the Indians at Shackamaxon.

Gordon's History, page 603.

The year formerly commenced with March as the first month, therefore, December is meant.

William Penn landed at New Castle on the 24th of October, and in Chester he writes on the 29th of the tenth month, 1682—"I have been also at New York, Long Island, East Jersey, and Maryland, in which I have had good and eminent service for the Lord."

"The Treaty under the Elm," probably was never placed in the office of the Secretary of the Commonwealth as it comprehended no purchase from the Indians, but a promise of protection and of "ground on which they could take their rest." From William Penn I have followed each link in the chain of evidence in connection with the Great Treaty, and from them infer that it was held on the 14th of December, 1682.

REDMOND CONYNGHAM.

#### LEHIGH COAL AND NAVIGATION COMPANY.

Report of the Board of Managers of the Lehigh Coal and Navigation Company, to the Stockholders.—January 12, 1835.

Since the last Annual Report, the experience of another year has furnished satisfactory proof of the strength and permanence of the Navigation and other works on the Lehigh, the whole of which are now in good condition.

In the spring of the year 1833, as mentioned in the last report, a portion of the coal was of necessity brought down, by the channels of the Delaware, in box-boats or arks. We have now the pleasure of congratulating the Stockholders that the use of this kind of boat is altogether discontinued, and that there has been no material interruption of navigation during the past year on the Delaware division of the Pennsylvania Canal.

The derangement of general business at the commencement of the year 1834, made the prospects of the coal trade in the spring extremely discouraging; but the extension of an approachable market, by means of the Morris Canal and the Delaware and Raritan Canal, enabled the Company, notwithstanding the general depression, to extend their sales to upwards of ninety thousand tons, a quantity considerably larger than they ever before sold in one year.

The several canals connecting with our mines now exceed two hundred and fifty miles in length, and furnish the company with the means of supplying the large and populous districts through which they pass with coal at less expense than it can be sent there from any other region. Coal has to a considerable extent been introduced to public notice, and brought into use along these several lines, and a foundation laid for a great and increasing demand for it on all of them.

By means of the Delaware and Raritan Canal coal was sent during the last year directly from Mauch Chunk to New York without trans-shipment; and a depot, prepared by the Company at Perth Amboy, which is generally accessible from New York and the ocean, even during winter, by vessels of the largest

size, has been stocked with coal. At present this Canal can be entered, without trans-shipment, only at Bordentown; but access, by means of its feeder, from some eligible point on the Delaware Canal, will no doubt speedily be furnished, and the expense of the circuitous route, via Bristol and Bordentown, and about one hundred and twenty feet of lockage will be saved on all the coal going eastward by this route.

The Managers anticipate that the depot at Perth Amboy will prove a valuable acquisition, and will become an important port for shipping coal to the Eastern states, for which the coasting trade of New York will furnish a supply of vessels wanting return cargoes.—New York itself will be supplied by boats direct from Mauch Chunk through one of the Jersey canals; or by sea from Philadelphia, should freights fall below the charges on the canals.

Under a contract with the Morris Canal Company, nearly twenty-seven thousand tons of coal were transported in the past year on that Canal, chiefly to New ark, the coasting trade of which place, together with its large import of lumber and other articles from Albany, furnished a demand for return freights, and thus enabled us to supply Albany and other places along the Hudson, as well as some of the eastern ports, at lower rates than heretofore. A new contract, and on more favorable terms than the former, has been entered into with that Company for transporting a large quantity of coal during the present year to the different markets on their canal, to Newark, and also to New York, without transshipment.

The demand for coal having, in consequence of the general depression, been much below the estimate made a year ago, a large stock is left on hand, including a surplus from 1833.

The prospects for our next season's coal business are, however, very promising. The demand will no doubt be large, as the overstock of former years will be chiefly consumed, and we have the means of placing coal in the market on terms at least as favorable as from any other source, which, in addition to the deservedly high character of Lehigh coal, will insure us a fair share in the supply. Contracts have been made for mining and delivering on board of boats at Mauch Chunk, both from the old mines and from those at Room Run.

The total quantity of coal shipped from Mauch Chunk during the year 1834, was one hundred and six thousand five hundred tons, the greater portion of which passed into the Delaware division of the State Canal.—The amount paid by the Company to the Commonwealth for tollage on that canal, in the past season, was twenty-two thousand five hundred and eight dollars and ten cents; in addition to which, the coal purchased at Mauch Chunk, and other freight to and from the Lehigh, carried by individuals on their own account, must have yielded a considerable sum to the State.

The general business on the Lehigh Canal is gradually increasing, but the connection with the Susquehanna by Canal and rail road is necessary to bring it into full vigour. Efforts are now making at Wilkesbarre for a rail road to connect that place with the Lehigh at Wright's Creek, the distance being by survey but fourteen miles. By a branch of this road to the Nanticoke Pond, and thence by the North Branch Canal to Berwick, the distance is ascertained to be not greater from Wright's Creek to Berwick than by the route of the Nescopec Canal. The managers believe that this rail road would suffice for bringing to the Lehigh Canal, and to the Delaware division of the State Canal the trade of the West and North Branches of the Susquehanna, until the transportation should become so large as to induce capitalists to construct the Nescopec Canal. The securing the completion of these two works, and by them the benefits of the immense trade of those two branches of the Susquehanna to the

whole length of the Lehigh Navigation, and to the Delaware Canal, may no doubt be effected by the persevering attention of the Company to promoting the early extension of the ascending navigation to Wright's Creek.

The following is a list of the freight which has been transported on the Lehigh Canal during the past season, viz.

	Tons.	cwt.
Coal,	106,518	05
Grain,	908	06
Flour,	2,700	09
Salt,	525	05
Salt Fish, Beef and Pork,	286	16
Other provisions,	184	02
Beer, Porter and Cider,	9	14
Whiskey,	340	03
Hay and straw,	84	13
Lumber,	3,461	05
Cord Wood,	1,865	10
Bricks,	42	15
Slate,	110	00
Lime and Limestone,	4,013	15
Other Stone and Plaster,	3,085	19
Iron,	343	18
Iron Ore,	1,378	05
Pitch, Tar and Rosin,	8	12
Merchandise,	3,218	06
Total,	129,083	18

The amount of tonnage, *exclusive of coal*, was

In 1833,	19,880 tons 16 cwt.
In 1834,	22,565 tons 13 cwt.

During the past year the rents of Real Estate and Water Powers, accruing chiefly at Mauch Chunk and South Easton, have produced a net income of about five thousand dollars, and they will doubtless continue to increase. At the latter place a Merchant and Grist mill has been erected, and a Cotton Factory is now about being commenced.

The Managers anticipate extensive sales of town lots and water power in the present year at South Easton, which must speedily become a manufacturing place of importance, from the large power located there, and the number of establishments already in operation.

The Stockholders are referred to the Treasurer's Report for the state of the finances, and to the Report of the Dividend Committee for the result of the business of the year.

By order of the Board of Managers,

JOSEPH WATSON,

*President.*

PHILADELPHIA, Jan. 12, 1835.

From the Philadelphia Gazette.

#### ADMIRALTY DECISION,

*In the District Court of the United States, for the Eastern District of Pennsylvania.*

January 23d, 1835.

Thackary and Crilly  
v.  
The American Boat  
"Farmer of Salem." } Sur Libel for  
Wages.

This was a Libel for wages alleged to be due for services performed by the Libellants, as Mariners, on the high seas. The Libel concluded with a prayer for process of attachment, &c. The Boat, which was of forty-two tons and upwards burthen, plied between the city or port of Philadelphia, and Cooper's Creek, a small stream which is nearly opposite thereto, and issues into the Delaware from the Jersey side of the river. The vessel was employed in bringing wood for fuel from the Creek to the city, and in no other service.—

On application to the Judge, at his chambers, the process prayed for in the Libel was refused, and on a subsequent day.

Hopkinson, J. delivered his opinion in open court. The Libel in this case was presented to me, at my chambers, on the 16th of December last, concluding with a prayer for process of attachment against the vessel, and that she should be condemned and sold for the payment of the wages claimed by the Libellants. The Libel contained the usual allegation, supported by the affidavit of one of the Libellants, "that the said boat or vessel is about to proceed to sea before the expiration of ten days next, after the delivery of her cargo." I declined to order the process asked for, and think it is incumbent upon me, to give my reasons for doing so, and the more so as the occasion is a fit one for an endeavour to bring within some rule or principle, a class of cases, which is now growing upon the admiralty jurisdiction of this court.

The Libel states, that the Libellant, Marmaduke Thackary, on the 13th day of October, A. D. 1834, at the port of Philadelphia, in the said District, at the request of Jacob Crawford, master of the American boat (of forty-two tons and upwards) "Farmer of Salem" shipped, as a mariner on board the said boat, to perform voyages on the high seas, and within the jurisdiction of this court, to wit from the said port of Philadelphia and Cooper's Creek, at the following rate of wages, to wit, two voyages at \$2.50 each; one at \$3; two voyages at \$1.50 each, and seven trips at \$2 each. The claim of the other Libellant is set out substantially, in the same manner.

There is certainly no want of formality in this Libel, and if we were not permitted to look out of it, there would be no want of jurisdiction in this court over the subject matter of it. The known truth of the case is this, Cooper's Creek is a small stream issuing into the Delaware from the Jersey side of the river, about two miles above the city or port of Philadelphia. The boat in question was employed in bringing wood for fuel from this Creek to the city, and in no other service, making her voyages, as they are called in the Libel at the rate of about two in every week. It appears that she performed twelve of these voyages in about six weeks.—The Libellants were hired and paid by the trip, by a verbal agreement, in the manner of hiring common laborers. Their duty was to take this boat to and fro, between the city and the creek, and to load and unload the wood brought by her to market. The time of the passage could seldom exceed an hour, and must have been frequently done in a shorter period. Such were the services and the voyages on the high seas, which are made the foundation for the jurisdiction of a court of admiralty for the recovery of the wages of the Libellants as mariners.

Applications have so multiplied for admiralty process to recover wages for services performed on board of our river craft, that I have found it necessary to make a pause in granting it, until I could carefully examine the subject, and if possible ascertain the limit to which the jurisdiction of this court may rightfully be extended in such cases. Little regard has been had in these applications to the character of the use or employment of the vessel, the manner in which she was navigated, or the nature of the contract and services to be performed. The common river boats, of every size, have become ships or vessels navigating the high seas; these daily trips, from shore to shore of adjoining states, are voyages on the high seas, and the loading and unloading of wood and similar articles for the market, brought from places within a few miles of the city, for daily wages, are denominated marine services, and maritime contracts. No more has been thought necessary to be shown, than that the thing floated on the water, and that the water was within the ebb and flow of the tide. I have in several of such instances refused the process demanded; but it has become necessary to do it in a

more formal way, and to attempt to fix some rule for the government of similar cases. I confess that I do not expect to be able to draw a clear line, which will decide the place of every case that can occur, to be within or without the admiralty jurisdiction, but I hope to fix some principles as a guide for future proceedings in this court, unless they shall be rejected by a higher authority. In pursuing the inquiry into which I am entering, I am saved from the immense labour (so ably performed by a learned Judge in the case of *D. Lovio vs. Boit*) of tracing the history of the jurisdiction of the admiralty through its struggles with the common law courts, and of noticing the faint, equivocal and changing lines that have been drawn, from time to time, between the powers of these courts. I shall not find it necessary to go beyond the constitution, legislative acts and judicial decisions of our own country which are imperative upon this court, and supercede every other opinion or authority. My examination of this interesting question will, consequently, be brought within, comparatively a narrow space, and may be made with reasonable brevity.

By the constitution, the judicial power of the United States is extended to "all cases of admiralty and maritime jurisdiction," and the judicial act establishing the courts of the United States, carrying into effect the jurisdiction granted by the constitution, has awarded to the district court "cognizance of all civil causes of admiralty and maritime jurisdiction." The inquiry then in every question of the power of the court, arising under this branch of its jurisdiction, is whether the case is of admiralty and maritime jurisdiction. This inquiry also might lead us over a vast space, but for our present purpose, that is, of determining whether the case now before the court is one of the description mentioned, it is unnecessary hardly to go farther, than to a judgment of the Supreme Court of the United States rendered with much deliberation and care.

The contract I am required to enforce must be maritime, or I have no right to touch it. In order to bring it within this description the libel alleges that it was for the performance of services on certain voyages on the high sea; were the services of the libellant rendered on the high sea in the legal signification of the terms? In the case of the steamboat "Thomas Jefferson" reported in 10 Wheat. 428, this question seems to have been put to rest, on principles long and well established. The opinion of the court was delivered by Justice Story. It was a suit brought in the District Court of Kentucky for the subtraction of wages. The libel claimed them on a voyage from Shippingport in that State, up the river Missouri, and back again to the port of departure; and the question was, whether this case was of admiralty and maritime jurisdiction or otherwise within the jurisdiction of the District Court.

I will here remark, that this was a case of a steam boat, navigated as they usually are, on a river far from the sea, but neither the distance nor the manner of navigating the boat, was made an objection to the jurisdiction. I may add, as a matter of notoriety that she was employed in transporting passengers and merchandise between the places of her departure and destination. The Judge learned upon all subjects, and peculiarly so on this, states that "in respect to contracts for the hire of seamen, the admiralty never pretends to claim, nor could it rightfully exercise, any jurisdiction, except in cases where the service was substantially performed upon the sea, or upon waters within the ebb and flow of the tide." Thus, as to the purposes of jurisdiction, in such a case, the court decides, in full conformity with acknowledged principles of law, that waters which are within the ebb and flow of the tide, are to be considered as the sea; and that a contract for wages to be earned on waters so situated is a maritime contract; that the service is a marine service, and the cause arising from them is of admiralty and maritime jurisdiction as fully as if they related to a voyage to

Europe. The judge presses the principle still further, and says, there is no doubt that the jurisdiction exists, although the commencement and termination of the voyage may happen to be at some place beyond the reach of the tide." In that case the libel was dismissed, for want of jurisdiction, because "the voyage not only in its commencement and termination, but in all its intermediate progress, was several hundred miles above the ebb and flow of the tide."

If then the locality of the service were sufficient to give jurisdiction to the admiralty over a contract, it is clear that I should sustain the present claim. The whole service was performed on the waters of the Delaware within the ebb and flow of the tide. In conformity with the doctrine of the Supreme Court, I have repeatedly taken cognizance of claims for wages earned in vessels plying as traders, carrying passengers and goods on freight, between this port and places on the river in the State of Delaware and New Jersey. In the case of the "*Pekin*," the question was elaborately argued in this court, and decided as I have mentioned.

But locality is not of itself enough to carry jurisdiction to the admiralty in cases of contract. We must also look to the subject matter of the contract, to the nature of the service and employment, and shall then discover that in some instances, the service may be done strictly and truly on the sea, and yet the cause will not be "of admiralty and maritime jurisdiction." It is true that in cases of torts, injuries and offences, the jurisdiction is settled by the place where they are committed, but not so as to contracts. The difficulty we have to struggle with is to establish a satisfactory rule or line, by which the subject matter of the contract and service may be clearly defined. I have acknowledged my inability to give such a rule, which will be universal in its application. Each case as it occurs must be decided by its circumstances under the control of some principle as nearly general as can be obtained on a subject so uncertain in its nature. It will be easier to say, that a particular service is not marine, than to give a rule which will embrace or exclude all that may occur.

By referring again to the case of the "*Thomas Jefferson*," we shall find a principle which will serve us for a general guide, to our inquiries. It is stated that "the material consideration is whether the service is essentially a maritime service." It is true that the question still remains, what is a maritime service? In that case the only test alluded to was the locality of the service, whether performed on tide water or not, because in that case no other question than that of locality arose or was necessary to be examined or decided. The libel was dismissed because the service was not done within the ebb and flow of the tide, and therefore clearly not maritime, however it might have been in other respects. But the court did not say or intimate that every service performed on tide water is therefore and necessarily a maritime service. That it was done on tide water is an essential circumstance, but *non constat*, that other circumstances may not also be essential to bring it under the admiralty jurisdiction. Can we say—did that opinion mean to say, that every thing done upon the sea, or upon tide waters is a maritime service? I think not.

In *De Lovio v. Boit*, 2 Gall. 4, 8. Judge Story assists us on this point. He says "the true interpretation of the words, *things done on the sea*, in this connection would seem to be all things done touching the sea, i. e. maritime affairs in general; and this is the approved interpretation asserted by the admiralty."—On page 440, he says, the jurisdiction extends to "all cases of marine service or labour." In both instances he shows that something besides locality enters into the question of jurisdiction; that we must attend to the nature of the transaction, the kind of service or labour, and inquire whether they relate to maritime affairs or not—and not merely to the place where they are done. If a thing done, or a contract made in fact

upon the land, is considered to have been done on the sea, provided that it relates to maritime affairs, we but follow out the same reason, or turn it back on the subject, in saying that if the contract or thing does not relate to maritime affairs, if the service or labour is not in itself maritime, they will not be taken, on the question of jurisdiction, to have been done on the sea, although in fact they were so. The circumstance of the where the thing is done follows the nature of the thing, and as that is maritime or otherwise, the jurisdiction prevails, or is denied. In the case of the "*Jerusalem*" the same Judge gives the law, as he did in the "*Thomas Jefferson*." "The true doctrine was always asserted by the learned judges of the admiralty, and has been recently recognized by Justice Buller, that the jurisdiction, as to contracts depends not upon the locality, but upon the subject matter of the contract;" and he adds, that the admiralty has "perfect jurisdiction over all maritime contracts." To be a maritime contract, as I have before said, it is not enough that the subject matter of it, the consideration, the service is to be done on the sea, it must have a connection with the navigation of the ship, or with her equipment, or preservation, or with the maintenance and preservation of the crew, who are necessary to the navigation and safety of the ship. Thus a carpenter, a surgeon, a steward, though not strictly marines, or seamen, may all sue for their wages in the admiralty because they contribute in their several ways to the preservation and support of the vessel and her crew.

With all his aid we meet with embarrassing difficulties in every attempt to designate a clear line, which will separate with satisfaction and consistency in all its parts, cases of contract and service arising on rivers into which the tide flows, proper for the admiralty jurisdiction, from those which are not so. On the sea, *extra fines terre*, the difficulty is hardly at this time felt, having been removed, or cut down by judicial decisions, as in the cases of the carpenter, surgeon, &c. But we have no such description of the vessel or her employment, or the services of those on board of her navigating our rivers, as will at once decide the question of jurisdiction. The circumstances of any given case, the kind of vessel, the business she is engaged in, the places between which she is navigated may make it apparent, that it cannot be one for the cognizance of the admiralty, without furnishing a general rule of exclusion. Cases will readily occur to the legal mind in which although the service is performed on the sea, or within the ebb and flow of the tide, no doubt can be entertained, that it is in no sense, a maritime service, and cannot be cognizable in the admiralty.

Nor does it depend upon the manner in which the vessel is equipped, with or without masts and sails; nor upon the power by which she may be propelled by sails, by oars, or by steam. Steamboats engaged in the business of trade, or commerce, are clearly subject to this jurisdiction; and a learned Judge in another district, has considered lighters employed on tide waters, in the carriage of goods to and from shipping, to be under this jurisdiction. On the other hand, boats having masts and sails may nevertheless be clearly without it; such as ferryboats used on the tide waters of our rivers, and plying from shore to shore between two States.—Also numerous boats of various sizes which are employed daily in bringing fruit and vegetable to the market. I think no one would hesitate to say that such vessels can with no legal propriety, be said to perform voyages on the high seas; nor that the persons employed on board of them, hired by the trip, or otherwise, are mariners engaged in maritime services. Indeed they are generally loaded and unloaded and navigated, by men who come from the fields and orchards, which they have cultivated, and bring the produce of their labour to its market. They are farmers and gar-

deners either for themselves or hired by others, and not sailors. If we should take the language of the Supreme Court, in the case quoted in its broadest significance, such boats so employed and those who navigate them, would be subject to the admiralty jurisdiction. The service is performed "upon waters within the ebb and flow of the tide." But as I have before said, the court had in their view only the case before them, which turned entirely on the locality of the service, and as to that they decided that the jurisdiction depended on the fact whether it was done upon tide water or not.—We have seen that they thought, as a general proposition, that the "material consideration was whether the service was essentially a maritime service;" and they applied the principle only to the case before them; deciding that it was not there a maritime service because it was not performed on the sea, or on tide waters, but not intimating that that circumstance alone would make a service maritime.

The character of the service, whether maritime or not, will depend not only upon the particular business or employment of the individual on board of the vessel but also upon the business or employment of the vessel. Thus a vessel may be navigated for foreign commerce on the broad ocean, but persons may be hired on board of her for services, which could not be called marine and of which the admiralty would take no cognizance. On the other hand, the individual may be engaged in the actual navigation of the vessel, but she may be so employed, that no service on board of her, can be considered to be maritime. In regard to the character of the vessel or the business in which she is engaged, which is the object of our present inquiry, it is not questioned that those employed in foreign commerce are within the jurisdiction of the admiralty. As to those which are employed on our tide waters, in going from place to place in the United States, I hold them also to be under the same jurisdiction, provided they are occupied in the business of trade and commerce, in a liberal and fair meaning of the terms, in which I do not include the petty traffic of market or ferry boats, nor the carriage of fuel to a city from its neighborhood, and other services of the same description. I am aware that there is a want of precision in this rule, and it is intended only as a general guide. In every particular case, the Judge must decide, from its circumstances, whether the employment of the vessel is in the business of trade or not; for so far I think the rule may be relied on.—The uncertainty is as to what should be considered to be trade and commerce. This criterion is not without support by good authority. Judge Winchester, whose learning in the admiralty law is highly and justly extolled by Judge Story adverts to it. He says, 1 Peters, Adm. R. 235, "Within the cognizance of this jurisdiction are all affairs relating to *vessels in trade*, and the owners thereof as such; and all matters which concern owners, proprietors of ships, as such," &c., again, "whatever is of a maritime nature, either by way of navigation upon the sea, or negotiation at or beyond sea, in the way of *marine trade or commerce*." In conformity with this rational and intelligible doctrine,—Judge Story, 2 Gall. 468, says that the words "admiralty" and "marine jurisdiction" include "all transactions and proceedings relative to commerce and navigation, and to damages or injuries upon the sea."

If we turn our attention to the act of Congress for "the government of seamen in the merchant service," under the provisions and authority of which this libel is filed and the process of the court demanded, many very direct arguments and inferences present themselves to induce us to believe, that a case like this never could have been in the contemplation of Congress in making the regulations, particularly as to the hiring of seamen and the recovery of their wages, found in that law. But I content myself with this general reference to it, as a particular analysis would require a longer ex-

amination and discussion than the occasion calls for or would warrant.

The general result to which my inquiry into this subject has brought me, is that as to torts, injuries and offences, *locality* gives jurisdiction; but as to contracts, there must be something more. It is not enough that the service performed, or to be performed, is on the high sea, or on tide water, it must in its subject matter be maritime; it must have some relation to trade and commerce; some connection with a vessel employed in trade, with her equipments, her preservation, or the preservation of their crew. Thus a carpenter, a surgeon, a steward all contribute, in their several ways, to the preservation of the ship, or her crew. But if the master should take with him a servant whose sole business should be to shave him, or comb his hair, or another to amuse him with a violin, the service would be performed on the high sea, but would it be a maritime contract or service, for which the ship could be libelled and attached in the admiralty, or her owners be made personally responsible by any process.

In a late case in this court, a libel was filed for wages earned on board of a boat employed in going from place to place, on bays and rivers, or tide water, in Pennsylvania, Delaware, Maryland, Virginia, and North Carolina, carrying a museum of curiosities, which were exhibited in the boat, at the various places at which she stopped. She had no other object. The libellants were engaged as musicians for the exhibition, but occasionally assisted, at their pleasure in rowing the boat, when the sails could not be used. She was a large canal boat. I dismissed the libel on the ground, that the contract and services of the libellants could in no sense, be considered maritime, although performed on tide water; on the other hand I sustained the libel of the crew of the steam boat *Ohio*, plying between this port and Delaware city in the State of Delaware, for she was employed not only in taking passengers, but in the transportation of merchandise between her port of departure and places in the northern and western states, which is strictly a trading service or employment. I do not mean to say whether a boat carrying only passengers would or would not be within the same rule.

I have thus given, not perhaps as concisely as it might have been done, a view of the reasons, which determined me to refuse the process prayed for by the libellants in this case. If they are not altogether precise and satisfactory, it may be because the subject is not susceptible of a rule, which will be certain and universal in its application, or because I have not the ability to define it with accuracy and clearness. Having taken upon myself to refuse to attach and detain the vessel at my chambers, I was obliged to do so without argument, as that would have produced a delay injurious and expensive to the party I thought not to be amenable to this court. Occasions may occur hereafter when this subject may be more fully considered and more satisfactorily decided.

From the Philadelphia Gazette.

#### COUNCIL DOCUMENTS.

The following are the principal reports made at the last meeting of Councils.

The select joint committee appointed on the memorial of sundry citizens, suggesting to Councils a subscription in behalf of the city to the stock of a company, for building and maintaining Tow Boats on the river Delaware, respectfully beg leave to report, "That in the discharge of the duties devolved upon them by Councils, they learned that the Legislature of the State in its session of 1832 and 1833, authorized a Company, for constructing and using steam boats, for towing vessels, between the city of Philadelphia and the Ocean, or to and from any of the ports or points on the Delaware, between the city and the Atlantic.

That the capital stock of the Company, was fixed at \$75,000, and resolutions were enacted for the proper disposition of the stock and the transaction of the business of the Company. Various circumstances prevented the citizens from giving proper attention to the provisions of the act of incorporation, until the present winter, when the closing of the river Delaware by ice and the consequent suspension of navigation, have recalled to the minds of the citizens, the importance of the proposed company and the necessity of the boats to the prosperity of our city's commerce.

Subscriptions to the stock amounting to nearly or quite \$60,000, have been made at the rate of \$100 per share, and one hundred and fifty shares, making fifteen thousand dollars are yet unsubscribed for. The whole sum mentioned viz: \$75,000, is necessary to the completion of the boats requisite for the plans of the Company.

Your committee having been called on to inquire into the views and prospects of the Company, with reference to the bearing of its operations upon the property of the corporation and upon the general welfare of the city, have made inquiries at sources of the best information, and have arrived at the conclusion that the operations of the company, will have a most important and salutary effect upon the trade and commerce of our city, and of course while it benefits the property of individuals, along the margins of the two rivers, it cannot less favourably effect the possessions of the city similarly situated.

For a considerable portion of this winter the Delaware has been closed by ice, and at the present moment, there are ships lying ice-bound at the wharves, laden with merchandise for southern ports, which, with the aid of an ice-boat, such as it is the intention of the Company to construct, might have been at the present time far on, if not at the end of their voyages; vessels too lie for days at the mouth of our river unable to ascend for want of a favourable wind, or continue as long at the wharves, waiting a favourable wind to descend.

This delay would be prevented if tow boats were used on the Delaware as in other commercial cities.—Large portions of our foreign import, are every winter shipped directly for New York, in consequence of the uncertainty of having access to our city by the Delaware and our powerful and most active rival has also derived other advantages in the sale of goods from the apprehension entertained by western and southern merchants, that their purchase would be detained as they now are by the closing of the river.

The operation of these unfavorable circumstances though directly upon the interests of the merchants is yet scarcely less deleterious upon the interests of the community at large. The failure of commerce lessens the value of Real Estate and deprives the laborer of employment, thus diminishing the objects of, and multiplying the causes for, taxation.

The practicability of keeping open a passage for vessels in almost any thickness of ice has been sufficiently proved by the operations of the ice boat in Baltimore, where the navigation has not ceased this winter, and by the operation of the ice boat on the Delaware, which has crossed the Delaware with the passengers to and from New York.

There is no want of precedent for the subscription asked by the company from the city, and it is believed that the corporation is as deeply and directly interested in the success of the company, as are the individuals who have been most active in procuring the act of incorporation. Your committee are in possession of many facts all tending to show the importance of the proposed ice boats and tow boats, but they forbear urging them, in the belief that the subject will be generally understood and properly appreciated by Councils.

They therefore respectfully offer the subjoined resolution.

Resolved, That the mayor of the city be, and he is hereby authorised to subscribe in the name, and on behalf of the city of Philadelphia, for seventy-five shares of the capital stock of the Philadelphia Steam Tow Boat Company, at the rate of one hundred dollars per share; and that he be authorised to draw his warrant on the Treasurer of the city, chargeable to the sinking fund, for the several instalments upon the stock as they shall be from time to time called for—provided that the whole amount paid on account of said stock shall not exceed the sum of seven thousand five hundred dollars.

JOS. R. CHANDLER,  
MERRIT CANBY,  
FRED. FRALEY,  
RICHARD PRICE,  
JOS. LIPPINCOTT,  
LAWRENCE LEWIS.

Feb. 12, 1835.

#### *To the Select and Common Councils.*

The committee on markets, Report: That on the 11th day of December last, a petition was presented to Councils signed by a large number of citizens residing in the south-eastern section of the city, and referred to the committee asking for an alteration in the Second street market house. The subject has received the respectful attention of the committee, who are of the opinion that such alterations might be made as would increase the revenue and afford superior accommodations to those who attend that market, both as buyers and sellers.

The whole width of Second street between Pine and Cedar streets is 30 feet, the width of the foot pavement is 15 feet 6 inches, that of the cart way is 29 feet, and that of the walk under the eaves of the market house is 9 feet 6 inches. It is proposed to extend the curbstone which surrounds the market house 7 feet 6 inches bringing the eaves out the same distance, which will reduce the cart way to 21 feet 6 inches, being (6 inches, wider than the present cart way opposite the High street market) and give for the width under the eaves 17 feet 6 inches, a space about equal to the inside of the latter market house. On the west side of the Second street market house, the stalls extend 18 inches beyond the brick piers, forming what are called outside stalls or stands, which are occupied by farmers with the produce of their farms, at an annual rent of from 12 to 15 dollars each. On the east side the stalls do not extend beyond the piers and space, and there marked out and rented to persons selling vegetables and the produce of their gardens, at a rent of from 6 to 8 dollars each. It is now proposed to extend the stalls on the east side, so as to correspond with those on the west, and to rent them to farmers; and to run a complete range of new stalls on each side the whole length of the market house, inside of the curb stone. This will give us 96 additional stalls and increase the annual revenue from that market house, upwards of a thousand dollars. The expense of these improvements cannot be great, consisting principally in the cost of erecting the stalls, moving the curb stone and repaving, as it will be absolutely necessary to put a new roof on the building, whether the proposed alterations are made or not. The committee respectfully recommend that they should be made and for this purpose submit the accompanying ordinance.

PHILADELPHIA, Feb. 12, 1835.

B. H. YARNALL,  
L. LAMB,  
JOHN DARRAGH,  
MANUEL EYRE.

The Joint Special Committee appointed under the following resolution of Councils:

Resolved, That a Joint Special Committee of three members of each Council be appointed to inquire into the best measures to be taken for closing the Trust of the old Bank of the United States, and what prospect there is of obtaining possession of the House belonging to the city, under the Will of the late Stephen Girard, whose house is now in the tenure of the Cashier of the late Stephen Girard's Bank, without his paying any rent therefor, respectfully Report:

That, on the ninth day of May, A. D. 1812, the late Stephen Girard became the purchaser of the Banking House and its appurtenances, and a dwelling house at No. Chestnut street belonging to the late Bank of the United States, on the following conditions, viz: That the Trustees of the late Bank of the United States were to have the use of certain parts of the said Banking House, and the whole of the said dwelling house for the use of their Cashier, until the affairs of the said Bank are closed, In conformity with these conditions on the 25th day of June, 1812, the late Stephen Girard executed a lease to the Trustees for those parts of the Banking House and the Dwelling House which had been reserved, to continue until the affairs of the late Bank of the United States are closed. Some years subsequently, Mr. Girard purchased a lot of ground to the southward of the Banking House, and erected thereon a dwelling house, into which he transferred the gentleman who at that time was Cashier of the Trustees of the late Bank of the United States, and also Cashier of Mr. Girard's Bank. This transfer of their Cashier from the house in Chestnut street to the dwelling in Third street appears to have been made without the knowledge or concurrence of the Trustees, and the Cashier of the Trustees (being at the same time Mr. Girard's Cashier) has continued in the occupancy of the Third street house until the present time. Finding that the possession of the house depended on the closing of the affairs of the late Bank of the United States, the committee procured a copy of the account of the state of the Bank on the first Monday in September last, being the latest statement of the affairs of the Trust.

From this it appears that the sum of 22,564 dollars remains in the hands of the Trustees unclaimed by the Stockholders, or such persons as have been Stockholders, being half yearly dividends. Dividends of capital and extra dividends declared previously to first of September last. Since that time a further dividend of \$51,250 has been passed to the credit of the stock holders, and the residue of the funds belonging to the Profit and Loss Account (\$8,541 85) appropriated to the expenses of the Trust. The committee have also been informed by the Trustees that there are several debts due to the Trust from debtors whose estates are in the hands of assignees and also some other effects from which it is their duty to realize whatever may be in their power, and that they are personally desirous of closing the Trust as soon as possible. It appears, however, that the Trustees have not in progress or contemplation any other measures for closing their affairs than those heretofore employed (which have always had the approbation of the stockholders) and they are not aware that any others are within their power.

The committee at this stage of their inquiries, addressed a letter to the Trustees requesting to know on what terms they would be willing to give up the house now occupied by their Cashier, and also those parts of the Banking House which they have a right to use, and in reply to that communication have received a copy of the Minutes of a Special meeting of the Trustees, on the 12th Dec 1834, containing the following Resolution.

Resolved, That the Trustees entertaining doubts of their authority to make any disposition of the interest they hold in part of the Girard estate, inconsistent with the trusts upon which it is now held, deem it inexpedi-

ent to make any proposition for surrendering or disposing of it; but that they will receive and consider with respectful attention any proposition which may be made to them, for substituting for the accommodations they now have in the Girard Bank and Estate such other accommodations as the city may deem it more convenient to afford.

The committee having thus failed to elicit from the Trustees any proposition by which the city could come into possession of the property, and being invited by the Trustees to examine the subject, with a view to an adjustment of the matter at issue have examined the deed of trust under which the trustees of the late Bank of the United States are acting to discover whether that instrument furnished any means by which the city may be relieved from the expense of maintaining the trust.

Premising that a large proportion of the sum of 22,564 dollars has remained in the hands of the Trustees unclaimed nearly twenty years, and that it is extremely difficult to reach those who are really entitled to receive it owing to transfers of the Stock having been made without any reference to the dividends due at the time of transfer there is every probability that the amount now unclaimed will be increased by every succeeding dividend of the property of the Stockholders and the trust be protracted to an indefinite period. The committee are of opinion that the city might now safely undertake the administration of the remaining duties of the trust, and relieve the Trustees from responsibility. The deed of trust provides, "that at any semi-annual meeting of the Stockholders they may by a majority of the votes estimated according to the provision of the seventh section of the act of incorporation change the Trustees and appoint others in their place and stead," and we would respectfully recommend the adoption of the annexed resolution, providing that the commissioners of the Girard Estates shall endeavor to procure at the semi-annual meeting in March next the substitution of the city of Philadelphia for the present Trustees.—We believe that all the executive duties of the trust could be discharged by the Treasurer of the Girard trust without any material increase of his labour and the city receive a rent of about eight hundred dollars per annum for the dwelling house south Third street, which is now not only unproductive to, but also a charge for taxes and repairs on the residuary portion of Mr. Girard's estate.

Resolved, That the commissioners of the Girard estates, be and they are hereby authorised and directed at the next meeting of the Stockholders of the late Bank of the United States, to take such measures as they may deem expedient for promoting a transfer of the rights and duties of the Trustees of said late Bank of the United States, to the Mayor, Aldermen, and citizens of Philadelphia, provided the assent and co-operation of the present Trustees can be obtained for that purpose.

FRED. FRALEY, Chairman.

THOS. DUNLAP,

MERRIT CANBY,

RICHARD PRICE,

MANUEL EYRE.

PHILADELPHIA, Feb. 12, 1835.

From the Philadelphia Gazette.

## SALES OF STOCKS AND REAL ESTATE.

BY C. J. WOLBERT.

February 12, 1835, at the Philadelphia Exchange.

1 share Walnut street theatre,	\$237 50
1 do do	235 00
1 do do	250 00
1 do do	227 00
2 do do	227 50— 465 00
7 do do	225 —1575 00



1 do Philadelphia Ice Company.	38 09
4 do do	37 50—150 00
1 do Philadelphia Library,	35 50
1 do do	34 00
3 do N. Liberties and Penn Township Rail Road,	37 00—111 00
10 do Bank United States,	106½—1066 25
99 do do	106 60—10553 40
39 do Schuylkill Bank,	60 —2340 00
A three storied brick house and lot on Penn and Water street, between South and Ship- pen street, 17 feet by 100,	2000
A large lot on South and Shippen street be- tween 9th and 10th street 105 feet on South and Shippen street by 270,	9000
A lot in Hamilton Ville, 150 feet on Andrew street by 175 feet on Margaret street,	500
A lot with the frame tenement and Stables at the south-west corner of 5th and Christian street 100 feet on Christian street by 61 feet on Fifth street. Subject to an apportioned ground rent of \$3 72 cents,	2500
The lot, with the buildings thereon, on the south side of Library street, No. 12, 25 feet 4 inches by 111, widening on the rear to 36 feet,	8200
The lot, with the buildings thereon, on the north side of Walnut street, between Dela- ware 4th and 5th street, 64 feet 9 inches by 124 feet,	20,300
The undivided fifth part in those tenements and lot of ground, in Germantown, and on the S. W. side of the Germantown main street containing about 12 perches and a half,	160
The frame tenements and lot on the north side of Shield's alley, 15 feet by 53. Subject to a ground rent of \$60.	250
The frame message and lot on the east side of Delaware 12th street between Pine and Lombard streets 19 feet 3 inches, by 63 feet,	1000

## REPORT OF THE COMMITTEE OF WAYS AND MEANS.

Report of the Committee of Ways and Means, in relation to the Revenue to be derived from Banks—Mr. Morris, Chairman. Read in the House of Representatives, February 2, 1835.

The Committee of Ways and Means, to whom the general fiscal concerns of the Commonwealth were referred, having among other subjects, bestowed no inconsiderable degree of attention to banks and their operations, as connected with the revenue of the state.—They have approached the subject with much diffidence and caution, being well aware of the great and important interests involved, as being intimately connected not only with the continued and successful prosecution of our public works, but also closely allied with individual prosperity, on which mainly depends that of our associated interests. In reflecting on this subject, as connected with the special duty assigned to the committee of ways and means, they have considered it obligatory on them to provide the largest amount of revenue from all proper sources, not inconsistent with a due regard for those portions of the community who may be supposed to be more immediately and personally interested in the imposing of taxes or exacting premiums to a greater extent than has hitherto been demanded; and as some increase of burthens on the banking class of our citizens will be proposed, the committee feel a strong conviction on their minds, that by so doing they are but acting in the strict line of their duty, without the least desire or intention of producing the smallest embarrassments in the operations of these institutions, or crippling their means of ac-

commodating to every proper and reasonable extent, the communities in which they are severally located. Yet it cannot be denied, nor will your committee pretend to conceal, that the effect of the bill herewith presented, will materially lessen the profits to be derived by the holders of bank stock; on the contrary, they are willing to meet the question at once, and frankly avow their decided conviction, that this kind of property does not, nor ever has paid an equivalent for the valuable and important privileges that are legally monopolized by its proprietors. Your committee do not use the term *monopoly* in any invidious sense, or by any means desire to suggest the impolicy or impropriety of creating such institutions as they now exist;—such a course would be foreign to their duty, and not called for on the present occasion—but they do mean to say, that these institutions possess powers and privileges from which the vast majority of their fellow citizens are excluded, and cannot participate even in the most remote degree, and that these beneficiary enjoyments do not in their opinion, contribute a full, fair and equitable proportion to the common fund. Your committee will not stop to inquire into the justice or propriety of subjecting these institutions to the payment of any tax or assessment whatever, but will assume, from long established and frequent precedents, that such levies are just and proper.

With this assumption yielded, your committee have anxiously though unavailingly, sought for a reason, why institutions seeking and demanding a re-enactment and continuation of these valuable privileges, for a term equal to that of the original charter, should be placed in a better situation at the date of the re-charter, than they were at the commencement of their operations. It must surely be assented to, that the parties to the original contract did not imagine that the grantors were giving a doubly protracted existence to the institution they were about to establish; whilst it must be equally evident, that the corporators contracted and paid but for a term of years, as specified in the act which gave them existence. At that period, they would not have ventured to put forth such a claim.

Without entering on the subject more at large, your committee cannot resist the conclusion, that *all* banks asking and receiving re-charters, *ought* to pay a bonus or premium therefor, and in order that equal and exact justice may be measured to those now applying, and to such as have already been re-chartered, the bill herewith presented is so framed as to place them on an equality.

In accordance with the sentiments before expressed, the tax on dividends is proposed to be raised from eight to ten per cent. with a full and honest conviction, that such increase, so far from being beyond the ability of the banks to bear, is much less than might be imposed, without producing any embarrassment whatever.

One other principle is also engrafted on the bill, that of lessening the maximum; beyond which, 50 per cent. of the excess of dividends is made payable into the state treasury. A late vote of this body, lessening the maximum for the West Philadelphia rail road, goes far in supporting the opinion of the committee in regard to this feature of the bill, and whilst they recognize the correctness of the principle then established, and applied to a bill aiding our internal improvements, they cannot but consider it as far more applicable to institutions governed by different principles, and whose establishment is asked for with far different motives.

## AN ACT RELATIVE TO BANKS.

Section 1. Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in General Assembly met, and it is hereby enacted by the authority of the same, That the president, directors, and company of the Gettysburg Bank; the Mechanics' Bank of the city and county of Philadelphia; the Farmers' Bank of Reading; the Commercial Bank of Penn-

sylvania; the Bank of the Northern Liberties, in the county of Philadelphia; the Monongahela Bank of Brownsville; the Bank of Middletown; the Kensington Bank; the Bank of Montgomery county; the Bank of Chambersburg; the Carlisle Bank; the Bank of Delaware county; the York Bank, and the Erie Bank, shall pay into the treasury of the Commonwealth, five per cent. on the amount of the capital stock of each of said banks, as a bonus for their chartered privileges; said bonus to be paid in three equal annual instalments, commencing on the first Wednesday of June, A. D. 1835.

Section 2. The president, directors and company of each of said banks, shall transmit to the State Treasurer, for the use of the Commonwealth, during the period of their existing charters, and during the period their or either of their charters shall have been extended, two per cent. of the whole amount of dividends which shall be declared, in addition to eight per cent. which by law they are now required to pay, subject to the provisions of the twenty-fourth article of the third section of the act of the twenty-fifth of March, 1834, entitled "An act to re-charter certain banks."

Section 3. Whenever the dividends arising from the profits of any of said banks shall exceed ten per cent. per annum on the capital stock actually paid in, then one half of such excess shall be paid into the treasury for the use of the Commonwealth, provided that the provisions of this section shall not be construed as extending to the York Bank, or the Erie Bank.

Section 4. The president, directors and company of the Pittsburg Bank, and Schuylkill Bank, shall be subject to the provisions of the first section of this act, to the extent of capital authorized by the existing or present charters, and shall also be subject to the provisions of the second section of this act.

Section 5. The president, directors and company of the Bank of Northumberland, the Bank of Lancaster, the Farmers' Bank of Bucks county, the Northampton Bank, and the Southwark Bank, shall pay into the treasury of this Commonwealth, five per centum on the amount of the capital stock of each of said banks, as a bonus for their chartered privileges; said bonus to be paid in three equal annual instalments, commencing on the first Wednesday of June, A. D. 1835.

Section 6. The president, directors and company of the Moyamensing Bank; the Girard Bank; the Bank of Penn Township; the Philadelphia Bank; the Western Bank of Philadelphia; the Bank of North America; the Manufacturers' and Mechanics' Bank of the Northern Liberties of Philadelphia; the Southwark Bank; the Doylestown Bank of Bucks county; the Bank of Northumberland; the Miners' Bank of Pottsville, in the county of Schuylkill; the Merchants' and Manufacturers' Bank of Pittsburg; the Columbia Bridge company; the Lancaster Bank; the Farmers' Bank of Bucks county; the Northampton Bank; the Lebanon Bank; the Lumberman's Bank, and the Towanda Bank, shall transmit to the State Treasurer, for the use of the Commonwealth, during the period of their existing charters, two per centum of the whole amount of dividends which shall be declared, in addition to eight per centum which by law they are now required to pay, subject to the provisions of the twenty-fourth article of the third section of the act of the 25th March, 1834, entitled "An act to re-charter certain banks."

Section 7. The bonus or premiums, and the increase of tax on the dividends, as imposed by this act, shall be in full consideration for the privileges granted during the existence of the charters or re-charters of any of the institutions hereinbefore named: Provided, That the right of the Legislature to revoke or annul any of the said charters, shall not be impaired in case the privileges are misused or abused, or shall prove injurious to the citizens of this Commonwealth.

Section 8. The president, directors and Company of each of the banks named in the fifth and sixth sections

of this act, shall be severally subject to the provisions of the third section thereof: Provided, That the said third section shall not be construed as extending to the Lumbermen's Bank, the Towanda Bank, and the Merchants' and Manufacturers' Bank of Pittsburg.

## REPORT OF THE MINORITY OF THE COMMITTEE OF WAYS AND MEANS.

Report of the Minority of the Committee of Ways and Means, in relation to the Revenue to be derived from banks.—By Mr. Irish.

The undersigned, a minority of the Committee of Ways and Means, from whom the bill is reported, entitled "An act relative to Banks," ask leave to present to the consideration of the House, some of the most prominent views and reasons which have led them to differ in opinion with the majority of the committee, as to the expediency and effects of the proposed bill, in relation to the business and prosperity of the citizens of this commonwealth, should the same pass into a law. In the first place, they object to the expediency of exacting a bonus of five per cent. upon the capital stock of the banks of this state, on the ground of their inability to pay so heavy a sum in addition to the present tax on dividends, which it is proposed to increase from eight to ten per cent. These exactions will take from them a portion of their means to accommodate the public, and lessen the security to the holders of their paper, and in some cases, in all probability, discourage the stockholders from accepting the proposed renewal of their charters, on terms so burdensome as to render it uncertain whether their investments will return the ordinary six per cent. or legal interest; for one of the inducements to investments in bank stock is the privilege or hope of obtaining through the operations of a bank, a higher per centum for money thus invested, founded upon the requisite confidence in the knowledge, diligence, and integrity of the officers and directors of these institutions. This privilege is unquestionably the main object with stockholders; and on the other hand, they are as unquestionably liable to not only a disappointment in regular dividends, but to a positive diminution of the capital paid in. Instances frequently occur in many of our state banks, where, by losses sustained upon loans and other adverse causes, the stockholders are not only deprived of their dividends, but a considerable time is required to make good an impaired capital. These losses all banks are subject to; and this risk the stockholders take. Why? The reason is plain:—Simply because they enjoy the corresponding equivalent of sometimes obtaining an increased per centum. Where there is risk there must be a prospect of increased gain. This principle is so clear, laying as it does, at the bottom of every trade, occupation or business, that no more is necessary to make it understood, than plainly to state it.

To the second proposition contained in the bill, for increasing the tax on dividends from eight to ten per cent. the undersigned do not hesitate to yield their support, and this increased burthen is certainly a strong additional argument against demanding the proposed bonus of five per cent. as specified in the bill. The contemplated restriction, or what is equivalent to a restriction, that one half of the excess of all dividends over ten per cent. per annum, shall be paid into the state treasury, is objected to upon equally strong grounds. In the first place, its total inefficiency as a source of revenue; for no bank, it is believed, would, however favorable its position or circumstances, make an effort or be disposed to increase its risks, to reap but half the profits derived therefrom. In other words, to loan money upon the ordinary securities, for three per cent. Again, its operation would be manifestly unjust to stockholders, where, for instance, a bank from unforeseen losses, is unable to declare more than a half

or one per cent. dividend for one year, but the next, or at any future period, by a combination of favorable circumstances, or a recovery of such losses, it might be able to pay an additional dividend in remuneration for one or more profitless seasons, and that dividend equal to twelve or fourteen per cent. per annum, it is clear that injustice would be done to the stockholders by taking from them one or two per cent. as under such a provision would be the case.

The proposed bonus of five per cent. is not confined to the banks now before the legislature. The provisions of the bill act retrospectively upon many of the banks which have been heretofore rechartered. This proposition is attempted to be justified by the provision introduced in their charters, reserving to the legislature the power of making subsequent alterations, restrictions and provisions. Was it contemplated by either party, the legislature or the banks, that the reservation should at any time be applied by a demand for a bonus of five per cent. or any other specific amount? For the right to demand one per cent. may be extended to a demand of ninety-nine per cent. upon the whole capital of a bank. It is believed by the undersigned, that such a principle or power was not in the contemplation of either party. It is plain that this proposition, at the present time, is but to justify the imposition of a bonus upon the banks now before us with applications for re-charters; or, in other words, to make precedents whereon we may found *present* decision. Surely the legislature will not act upon such an unjust principle.

Again: manifest injustice will be done to the present stockholders in their retrospective demand, many of whom have no doubt recently purchased their shares; for stocks in all banks are constantly changing hands. The proposed measure would operate prejudicially upon these in two ways—first, by the exact amount taken for the bonus, which is directly reducing the value of their stock; and secondly, more seriously both to them individually and the State itself, by impairing confidence in the stability of investments made in these institutions. The legislative reservations of power, stretched to property thus invested, will naturally create apprehensions, and occasion a greater diminution in the value of stocks than the amount of the tax proposed.

The undersigned proceed now to review some of the general grounds of their objections to the proposed bill. In imposing additional burdens and restrictions upon banks, he must be a very superficial observer who does not perceive that the bearing of this policy is not alone upon the banks and the stockholders, but collectively and individually upon the whole Commonwealth—upon the State and its finances, the people and their property of whatsoever denomination.

By the last annual returns to the Auditor General, showing the situation of the banks in this State, all who have examined them could not fail to perceive that their condition is perfectly safe, and that the general confidence of the community, in their ability to meet all demands, is not misplaced. It is believed that at no previous period have the banks of the Commonwealth exhibited to the public a more satisfactory statement of their sound condition.

Adequate evidence is afforded that the State must look forward to the winding up of the affairs of the Bank of the United States; and by the people of no State in the Union is that event to be viewed with more interest, and provided against with more caution, than by the citizens of Pennsylvania, either as to the extent of business transactions heretofore dependant upon that institution, or as to the effects to be produced upon our currency and finances by its closing operations. Where are we to look for the means of supplying accommodations for the first? and where, to fill up the vacuum, and afford the means, through all occupations, trades and industry, to remedy the latter? Most clearly to our own State banks.

Our State canals and rail roads are now upon the verge of going into full operation—their usefulness, in a financial point of view, is to be tested within the period alluded to when the Bank of the U. States will have to close its concerns. In this important crisis, where are we to look for the medium of trade and commerce on our public works, to facilitate the exchange and interchange of commodities? where for the representative value of the products of our soil, and of domestic and foreign merchandise? Most clearly to that confidence between man and man, consequent upon capital being put into regular and efficient operation, through the medium of our State banks. If the Legislature cripples these, confidence receives a withering blow—capital, paralyzed, hides itself or escapes, and our public works become, instead of a proud, a melancholy monument to gaze upon, without spirit or life to remunerate the hand that formed them. Credit and capital, made sound, active and efficient, by the healthy operation of our State banks, is as essential to make our canals productive, as the water in them is indispensable to floating the craft upon their surface.

The people of Pennsylvania are anxiously looking to the public works for a revenue, adequate at least to pay the interest upon the money borrowed, from time to time for their construction. And it is an unquestioned solemn duty, imposed upon those who are intrusted with the legislative power of the state, to hasten the period when this just solicitude shall be gratified. The undersigned are deeply impressed with a conviction, that the proposed additional burdens and restrictions upon the State banks, will have a most powerful influence in protracting the period when our public works will pay the interest upon the cost of construction; and, on the other hand, they are equally impressed with a belief that, in wisdom, the Legislature ought to abstain from any experimental or oppressive exactions from our banks, by which confidence would undoubtedly be affected, and, of consequence, credit impaired, both in these institutions and between man and man. Enterprise, checked within our own borders, would seek to gratify itself in other regions; the impaired condition of our commerce would be most distressingly manifest, in the diminished income from the public works: and where, the undersigned would ask, are we to look for supplies to remedy this deficiency? Where is the burden to fall? Shall we lay it upon the then already crippled banking institution? Our commerce will then have suffered much from the effects of former exactions; and it would be extremely unwise to increase the depression, by aggravating further the cause. That such will be the consequence of the bill reported by the majority, is too apparent to be questioned; and this very consequence is what the undersigned are most anxious to avoid. The institutions themselves, or their Stockholders, will also most certainly seek to avoid it.

That the very operation of additional burdens, here anticipated, has already commenced, the undersigned have learned from indisputable sources. It is to be seen in the transferring of capital, by citizens of this State, out of the reach of our jurisdiction; and the sale of stocks in our banks—the proceeds re-invested in banks of other States. Then, to repeat the question, where are we to look for sources of revenue to make up the deficiency in the tolls of our rail roads and canals, which would necessarily follow upon the adoption of the policy proposed? Where is the burden then to fall? The answer to us is clear. It must be thrown upon the landholder, upon the agricultural interest of the State. And can these escape or elude the ponderous weight? Temporary occupants of the soil may; but the proprietor must remain.

The undersigned will not now pursue consequences so painful to anticipate. They trust the House will pause before it is led into any experimental action upon interests so vital and sensitive, as those of confidence,

credit and capital; for in these lay the foundations of prosperity to every branch of trade, industry and labor. The regulations of currency are matters of great delicacy, as well as of primary interest and importance. All experience has proven that to manage and adjust these regulations, require much deliberation, wisdom and foresight. It is not our purpose here to enter upon the investigation. We have now, for every business purpose, a sound, convenient and trustworthy currency. The value of every description of property is based upon it: all, or nearly all existing debts and contracts are likewise based upon it—the State engagements included. The disturbing of any or all of these relations, we are most anxious to avoid. This is the moment of all others, in our State affairs, the most delicate—the value of our internal improvements about to be tested—an immense vacuum in the currency of the country soon to be created by the dissolution of the Bank of the United States! The undersigned, then, solemnly ask, if such is a propitious season for making doubtful experiments upon the vital interests of our state?

JEDIAH IRISH,  
JOS. T. MATHER,  
SAM'L ANDERSON.

### ATHENÆUM OF PHILADELPHIA.

#### *Twentieth Annual Report.*

In compliance with the provisions of the Charter, the Directors of the Athenæum submit to the Stockholders at their annual meeting, a statement of the finances and general condition of the Institution for the past year.

The accounts of the Treasurer herewith submitted, show that the receipts of the Institution, during that period were two thousand nine hundred and forty-five dollars and thirty-one cents, derived from the following sources, viz:—

From 415 Stockholders	1,600 00
arrears of do.	44 00
69 subscribers for a year or part of a year	476 00
sale of seven new shares at 25 dollars	175 00
Transfers	5 00
Interest of Stock exclusive of the Lehman legacy	585 31
	<hr/> \$2,945 31

During the same period, the disbursements have amounted to two thousand nine hundred and sixty-four dollars and fifty cents, and were chargeable as follows, viz:

To the purchase of books, magazines, foreign periodicals, and English and French newspapers	\$647 97
American newspapers	281 53
Lights and fuel	329 45
Furniture	120 24
Binding of books	115 25
Rent of rooms	475 00
Salary of Librarian	600 00
Commissions on collections	118 00
Postage	129 96
Incidental expenses and wages of Messenger	147 10
	<hr/> \$2,964 50
Exhibiting last year an excess of expenditure over receipts of	<hr/> \$19 19

The amount of capital invested in stocks and mortgages is as follows.

Amount of stock fund invested	\$9,885 65
Lehman legacy	13,239 45
Aggregate	<hr/> \$23,117 10
Having increased since the last report, by the sum of	<hr/> \$588 89

The above result indicates a favorable state of the finances, and confirms the hope previously expressed, that at some period, not very distant from the present, the Athenæum may be able to secure for itself, permanent and comfortable accommodations in a building of its own.

During the past year, the Institution lost one of its valued members, John Savage, Esq. who with becoming liberality, bequeathed to it the sum of one thousand dollars, besides a reversionary interest, under certain contingencies, in a large portion of his splendid estate. These contingencies are remote, and the institution may never be able to claim this residuary interest, but the handsome legacy of one thousand dollars will doubtless be paid within the present year, and may go to increase the stock fund.

The Athenæum continues to be frequented by many members, and by strangers sojourning in our city. Of the latter upwards of nine hundred were introduced to the rooms during the present year, and all, it is believed, experienced a feeling of gratification at the facilities it afforded them.

It is pleasing to observe that the number of our Stockholders is gradually increasing, and that notwithstanding the many other institutions of an analogous character which have sprung up in various parts of our city, the Athenæum continues to maintain its former favor in public estimation.

Twenty years have this day elapsed since a few individuals in our community, ventured upon this untried experiment. Those of them who survive, have now the pleasure of beholding this work of their hands placed upon a firm and permanent basis. The purposes of the institution are now fully understood and duly appreciated. Perfect harmony has prevailed among its members, and the constant accessions to its permanent fund, as well as to its library and collections, not only add to the intrinsic value of its shares at this moment, but justify the hope that it will still continue to increase in usefulness, and to realize the wishes of its founders by constituting at all times a source of rational recreation and improvement to our own citizens, and an agreeable place of resort to the stranger that visits our city.

On behalf of the Board of Directors.

WM. H. KEATING,  
T. I. WHARTON,  
JACOB GRATZ,

Committee.

From the U. S. Gazette.

#### THE WEATHER.

Notwithstanding the exceeding cold of Sunday last, it is remarkable that the wind was considerably South of West, so that it is not *alone* from the North that cold weather cometh. We subjoin some observations by an attentive correspondent, who, having neither to sow nor reap, has leisure to "observe the winds and regard the clouds."

Feb. 4. The Mercury in Fahrenheit's Thermometer at 6 o'clock in the morning, stood at 14 above Zero, or 0.

Feb. 5, at 6 A. M. the Mercury was 14 above 0. Same as yesterday.

Feb. 6, same hour, 20 above 0, and it snowed.

Feb. 7, clear and cold, and Mercury 14 above 0.

Feb. 8, Sunday morning, 6 o'clock, Mercury 2 below 0, at 9 o'clock 1 above, and at 12 o'clock, 10 above 0, at 3 o'clock, 10 above, at 6 o'clock, 7 above, and at 10 o'clock, at 6 above.

Feb. 9, at 6 A. M. two above 0, at 9 o'clock, 6 deg. above.

The cold Monday, January 5, the Mercury at 6 o'clock in the morning, was 4 below 0, but it moderated so fast that the mercury rose to 20 above 0, before one o'clock; so that if we take the average cold through the day, Sunday, Feb. 8, was several degrees the coldest.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.--NO. 9.

PHILADELPHIA, FEBRUARY 28, 1835.

No. 373.

## BIOGRAPHICAL SKETCH OF THE LATE THOMAS SAY, ESQ.

A Biographical Sketch of the late Thomas Say, Esq. Read before the Academy of Natural Sciences of Philadelphia, December 16, 1834. By BENJAMIN H. COATES, M. D.

During the twenty-two years which have elapsed since the first institution of the Academy, it is remarkable that our body has seldom, till the present occasion, been called upon to lament the death of one of its founders. That which, according to the usual course of human events, might have been expected to take precedence in the order of time, has occurred in the second place; and while we have had to deplore the loss of many of the brightest ornaments and most useful labourers of our association, the shaft of death has been but rarely directed towards that little band who first brought it into existence. The body which I have the honor to address, owes its origin to a few active individuals; and while the feelings of private friendship naturally revert to the virtues of the deceased, the having assisted in the creation of such an Academy, and promoted its usefulness by a long, steady and active course of scientific labours, forms the strongest claim which his memory can possess to the grateful reminiscences of the public. This is indeed pre-eminently the case in the present instance; so large a mass of the early writings of Mr. Say having been published in the Journal of the Institution as in a great measure to identify him with it. The same efforts by which our departed fellow member raised the reputation and extended the usefulness of the body to which he belonged, formed the foundation of his own; and it is perhaps not employing too strong a phrase, to allege, that the scholar and his infant association found their way to fame together.

The family of our deceased fellow member had been settled in Pennsylvania from the time of its first colonization. His ancestors by the father's side are understood to have been Huguenots, who emigrated to England in pursuit of religious liberty; and his lineal predecessor, in the fourth degree of proximity, came from England with William Penn, accompanied by others of his family. The integrity and activity of these high principled and determined men, were rewarded by a liberal share of the divine blessing upon the external circumstances which surrounded them. They and their descendants generally lived to an extreme age, surrounded by peace and abundance, and enjoying the confidence and respect of their fellow citizens within the colony. His grandfather, Thomas Say, was a very patriarchal man. Educated in the Episcopal church, by his step father Paschall and his uncle Robinson, he was united, early in the eighteenth century, to the religious society of Friends. While in that connection, his personal conduct and character were such as to acquire for him a high estimation among his friends and acquaintance. The confidence reposed in him was exemplified by his being frequently employed in the care of the estates of deceased persons, and in the guardianship of orphans; both of which trusts he conducted with great satisfaction, retaining, long after, the friendship of the parties he had served. It was also exhibited in

the respect paid to his religious character; although, as appears by a memoir of his life, published by his son, he differed from the religious association with which he was connected in certain doctrinal principles, inclining strongly to universalism. Dr. Benjamin Say, the immediate progenitor of the subject of these notes, was long known in this city as a skilful and benevolent practitioner of medicine, and enjoyed in that capacity a large share of public confidence and patronage. Having been connected with military proceedings during the war of independence, he joined that seceding portion of the society of Friends, known by the name of Free Quakers.

The immediate subject of our memoir was born July 27th, 1787, and was the eldest son of Dr. Benjamin Say and Anna, his first wife, a daughter of Benjamin Bonall, Esq. of Kingessing. In his early youth he was brought up in rigid compliance with many of the peculiar observances of the society of Friends or Quakers. He received a considerable part of his education at their school at West town, in Pennsylvania; and the remainder of it generally at the institutions of that religious body. He manifested, at this period, a remarkable docility of temper, a profound and confident respect for his parents and teachers, and a great fondness for study. He pursued, by his own choice, an extended course of reading among the writers of his own language; having compiled, at one time, a large volume of poetical extracts, arranged alphabetically.—These latter pursuits however, were not well suited to the bias of his mind; and, he soon forsook poetry altogether, devoting himself exclusively to the accumulation of fact or natural truth.

At an early period of his life, a near family connection with the celebrated naturalist, William Bartram, of Kingessing, induced the young Say, together with several of his acquaintance, to devote a considerable amount of time to collecting objects of natural history for their venerable friend's museum. This occurrence seems to have fixed his destiny: the student, young as he was, felt himself at once in his proper sphere. He immediately commenced the study of natural history; a pursuit which, though occasionally suffering a temporary interruption, was never wholly laid aside for the remainder of his life. The natural gaiety of youth, the attractions of fashion, the multiform allurements which surround a young man of easy fortune, and even the serious claims of a commercial establishment, were all capable of occupying his mind but for a short season, to be soon superseded by those boundless cravings for knowledge which an Almighty Power had placed within his breast. In the most elated moments of youthful excitement, he would abruptly relinquish the occupation in which he was engaged, if an opportunity occurred for enriching his collections with an insect; and when, at a subsequent day, in compliance with the earnest wishes of his father, he entered into commercial engagements, the future naturalist was found by his friends occupied with those pursuits for which nature had designed him, and leaving the details of business to others. The commercial efforts proved unsuccessful; and Mr. Say, deprived of his patrimony, instead of endeavouring to repair the loss, resolved to devote himself exclusively to natural history. From this

may be dated the commencement of his purely scientific career: he now began to consider science as a profession. As has so frequently been the case in the lives of learned men, the loss of worldly prosperity seemed the road to higher intellectual distinction and more enlarged usefulness.

The studies of the youthful naturalist, about this period, underwent a temporary interruption, from his service as a volunteer in the last war between our country and England. In common with several of his friends and relations, he became a member of the first troop of city cavalry, and in that capacity proceeded to Mount Bull; where he remained for some time during the years 1812 and 1813. The breaking up of this military post, however, soon left him at liberty to return to the pursuits for which he felt so strong an attachment.

In pursuance of his recent determination, he had already devoted considerable labour to the study of natural history, and the collection of the natural productions of our country, when he found the arena of his usefulness suddenly extended by the formation of this Academy. When, on the 25th of January, 1812, the little association which had previously employed itself in pursuits of a more private character, agreed to assume the style and character of our present institution, it was considered of importance that Thomas Say, though absent from the meeting, should be assumed as an original member. The compliment thus paid to a modest and retiring man, shows, as was intended, the value which was then set upon his adhesion by the six others who thus associated him to their number. How amply his subsequent course justified their selection, all the volumes of the Journal, and all the foreign correspondence of the Academy can abundantly testify.—He came among them a disciplined naturalist. Such was the effect of private study, that his subsequent acquaintance had no opportunity of witnessing the infancy of his scientific powers. His elementary knowledge was complete; his acquaintance with classification adequate, and his power of observing and discriminating, accurate and ready. He was at once prepared for the difficult and laborious task of describing and cataloguing American productions in natural history. He was fully fitted at all points for academic usefulness.

In the tasks undertaken by Mr. Say, either separately or with his colleagues, almost every thing was to be done. The study of the invertebral animals was to be introduced to the notice of our citizens. A taste for natural history was to be created and diffused.—The departments of botany and ornithology, almost the only ones which then received a share of attention in Philadelphia—the one almost confined to the elementary pursuits of a few students of medicine, or young people from schools, ambitious of a more liberal education than they then received; the other, to the curious and admiring readers of Wilson, were to be furnished with a rallying point; and the popular attention was to be at the same time directed to the various other branches. It was not that the studies selected by Mr. Say, then incomplete, were to be further extended: the studies were to be created, and the students induced to prosecute them.

For these purposes, his efforts were truly unremitting. Besides the very large amount of his writings for the Journal, he was attentive and regular in his presence at the meetings; and during the intervals may be said to have been always at his post at the academy. Those who were then in the habit of visiting the building, will abundantly recollect the uniformity with which he was to be found there. Others might attend more or less, as service on committees, leisure, or the wish to pursue particular inquiries might demand or render convenient; but Mr. Say was always added to the number, always employed in the one unremitting, untiring, unmodified pursuit, the study of natural history. The value of such assiduous attendance, by such a man,

may be easily imagined. Those who were disposed to visit the establishment, were at all times certain of agreeable society; for Mr. Say was ever attentive to all reasonable calls for conversation, so much so as even to surprise his friends. The books and specimens were, through his means, of ready access, while at the same time, his presence was a check upon confusion, loss and disorder. His uniform attendance operated as a powerful encouragement to the practice of studying within the walls of the institution.

This indefatigable and eminent naturalist was at all times ready to bestow the fruits of his own researches upon those of his friends who felt an interest in similar pursuits. In this manner he was incalculably serviceable to young students in natural history, by his advice and assistance; feeling far more anxious to extend the sphere of science in his country, than to increase his own fame. This generosity in bestowing upon others the results of his own industry, so highly characteristic of true genius and real love for science, might perhaps be referred, in part, to a sense of his own strength.—He had reputation to spare, and could hardly avoid feeling aware, that the inquirer who grew in science must inevitably form a higher estimate of the teacher of whose merits he thus became a better judge. The effect of Mr. Say's liberality of disposition, with his amenity of manner, was peculiarly fascinating, and tended forcibly to produce, in the same individuals, a combined feeling of love for the science, and for the naturalist who had thus gained their affections.

In May, 1817, the publication of the Journal was commenced, and Mr. Say continued, during the next ten years, to be one of its steadiest and most laborious contributors. Whatever contingencies might take place in regard to the services of others, his assistance, personally, when in the city, and at all times by the labours of his pen, was never wanting. In the autumn of that year, the expedition to Florida was organized, for the purpose of procuring objects of natural history. The party consisted of Messrs. Macclure, Ord, Say and Peale; who spent the winter in that country, and collected a large number of specimens, with descriptions of many of which they afterwards enriched the Journal. In 1819 and 1820, the celebrated expedition to the Rocky Mountains took place, the particulars of which are before the public, so far as to render it unnecessary to enter into details in the present paper, particularly as these are not scientific in their character. His learning, his patient industry, and the confidence reposed in him by all the officers of the detachment, are visible in every page of the narrative; and the large portion which he contributed to the work is acknowledged by the editor. This embraces the whole of his favourite department, the invertebral animals, together with a great variety of additional subjects, to which, from circumstances of various kinds, it was convenient that Mr. Say should direct his attention. In the expedition to the sources of St. Peter's River, &c., performed in 1823, at least equal labour, in proportion to the time employed, was bestowed by our late member upon the collection of materials; although a portion of the preparation for the press was saved him by his friend, W. H. Keating, Esq. the editor.

During the period of our narrative, honors from abroad came thick upon him. On these, however, he set but a limited value, except where they were the means of extending or increasing a knowledge of natural history. His correspondence with distinguished foreign naturalists occupied a large portion of his time, although constantly confined to matters of science; and thus superseded much of the letter writing which would have been dictated by private friendship.

In the year 1825, at the foundation of the celebrated settlement of New Harmony, Mr. Say removed to that place, at the request of his friend William Macclure, Esq. His residence there, as well as that of several other learned men, should not be confounded with the ec-

centric experiment of which, by the agency of Mr. Robert Owen, the same place was made the theatre.—It was for the purpose of constituting a school of natural science under the patronage of our liberal President. By the munificence of that distinguished individual, he enjoyed, in the wilds of the far west, all the advantages of a splendid library, abundant facilities for making collections, and a ready printing press. It is unfortunate, that some of his elaborate papers are not only rendered difficult of access to the scientific world, but exposed to the risk of being separated or destroyed, by their committal to the evanescent pages of the newspaper of the place, the *New Harmony Disseminator*. To this it may be added, that the columns of that paper suffer under the dislike and disapprobation of all that large portion of the community who stand opposed to the very peculiar doctrines in relation to religion, politics, and domestic life, which were introduced to the public through its agency. Owing to these causes, naturalists are deprived of the use of many of the most valuable papers of Mr. Say, which it were to be wished might be republished by some one of the learned societies which are proud to acknowledge him among their members.

The scientific world is, however, in possession of a considerable amount of matter which was the fruit of his industry while at New Harmony. It was there that he composed the second and third volumes of his splendid *American Entomology*, of which the first volume had already appeared, and the six numbers of his *Conchology*. The volumes of the *Entomology* were published in Philadelphia—the others in Indiana.

It was while at New Harmony that Mr. Say's domestic happiness was enhanced by his marriage with Miss Lucy W. Sistare, of New York, a lady in every way qualified to add to the felicity of such a man. In addition to many elegant accomplishments, Miss Sistare possessed the advantage of a fondness for the same pursuits, and great readiness and neatness with the pencil; a talent which was employed to the advantage of the beautiful works which we have just named.

Besides the elaborate description of a number of natural objects collected at New Harmony, and also in Mexico, during the tours in that country made by Mr. Maclure, our fellow member found himself, at this late period of life, again involved in the cares of business and the superintendence of property. Amid the chaos of mind which the settlement presented, Mr. Maclure felt the value and necessity of old and tried friendship, tested honour and untiring industry, in the care of his vast estates. In none could he confide with more unhesitating promptitude than in the subject of our memoir; and he who in early youth had sacrificed his own property to the pursuit of science, was willing, in mature age, to devote his talents to the care of that of his friend. During the frequent periods of absence, which the state of Mr. Maclure's health or the various scientific objects he had in view rendered necessary for several years, he left his large property in the care of Mr. Say; a circumstance which materially added to the labours of the latter, and loaded him with a feeling of responsibility to which the middle of his life had been a stranger.

Amid these accumulating tasks and this honorable charge, the termination of his studies was now gradually approaching. The hand of death was busy upon the Wabash. The season was one of unusual mortality; and the ordinary and general causes of disease could only co-operate with the severe and devoted industry of the naturalist. Mr. Say's habits of steady and protracted application, excessive abstinence and loss of sleep, had long before this period exerted an injurious influence upon his health, exhibiting their effects in repeated attacks of fever and dysentery; and when, in 1833, he paid a short visit to his friends in Philadelphia, for the conjoined objects of health and science, the ravages of sickness were but too visible. Still, those

who knew him were not conscious that it was then for the last time that he visited his native city, or the walls of his beloved Academy. He recovered from one attack however, to be subsequently prostrated by another; and finally, the closing malady appeared on the 20th of September. This is described as a disease commencing with bilious symptoms, and closing with those of typhus fever with a highly nervous character, accompanied with dysentery. On the 8th of that month he appeared to improve; but on the following day his debility increased in an alarming manner; and on the 10th he sunk into the arms of death by an easy dissolution.

Thus perished, while yet in the vigour of his years, an individual on whom creative wisdom appeared to have stamped in the strongest manner the characters of a master mind in the study of the works of God. His last days cannot be said to have passed away without regrets. Declining health and laborious cares had slowly undermined his spirits, a tendency to depression exhibited itself, and he appeared to feel, though surrounded by friendship and munificence, that he had not the independence to which his extraordinary talents and industry entitled him. The narrative is fruitful of instruction; yet the sketch of his scientific and personal character, ought, perhaps, to occupy a larger share of our sheets than we have devoted to it.

The communications of Mr. Say to natural science are numerous and of considerable bulk. We have appended a list of all those we have been able to obtain; with the double object of giving the best view in our power of their number and variety, and of enabling the future inquirer to find them with more facility. They are scattered through a variety of publications, not all devoted to natural history, and one of these even a newspaper; the student finds it impossible, without considerable exertion, to avoid overlooking some of them; and it is too much to be feared that individual memoirs are irrecoverably lost. Their number will probably surprise even some of his acquaintance. No estimate of their value, and the labour necessary to produce them, can, however, be founded upon their simple bulk; nor can they be compared to others upon such a principle. If we take into view the extreme labour which he uniformly bestowed upon his productions, first, to insure their accuracy, and then to compress them within the smallest possible space, the amount of work executed by this indefatigable writer will appear enormously augmented. But it is not by the rules of arithmetic that the labors of Mr. Say are to be judged in any respect. To form a just idea of the space in public utility occupied by our deceased fellow member, it would be desirable to make an estimate of the vacancies which existed in American science, of the judgment which he formed of them, and of the success of his endeavors to fill them. To do this in an adequate manner would require an extended grasp of the mind. He who attempts it should possess an enlarged and accurate acquaintance with the subject, the power of forming comprehensive views, and judgment and ability in expressing the results. To this rare combination, the gift of a few leading minds, your reporter fully feels that he possesses no claim; but it would be committing a disrespect to your nomination, to omit presenting such an outline as he is enabled to prepare.

We have seen that the larger lacunæ in the zoology of our country, embraced at the time when Mr. Say began his labours, the immense and obscure masses of amphibia, fishes and the invertebral animals. The fishes were principally left to the researches of Dr. S. L. Mitchell and Mr. Lesueur. The amphibia were passed by till they subsequently attracted the attention of Mr. Le Coote, Professor Green, Dr. Harlan, and others. It was in the immense range of the invertebrals that Mr. Say exhausted his labors; and among these it may be said, as of a former writer, that he left scarce any department untouched, and none that he touched unimproved. His descriptions of species are most numerous

among the annulosa and the mollusca: although he also made investigations among the radiata, as appears from the list of his publications, and among the entozoa. It is not to be supposed, that he exhausted any of these departments: the stores of nature within our country are too extensive, and much doubtless remains for future observers. Yet he described the large and laborious numbers which serve for the general materials of classification; he constructed the extended and accurate map, to which the task of making local additions is easy, but which forms the necessary and only guide to those who would make further admeasurements. It is not that there is no more gold in the mine; but in raising his own ore, Mr. Say has opened the shafts and galleries, pointed out the veins, and indicated, by his example, the best manner of working them. He has laid down the broad masses of colouring which, however they may be augmented and retouched by the persevering pencil of the future artist, must still form the basis, and in very numerous cases the perfection, of the picture. Every familiar object in these departments, that frequently met the eye, but produced a feeling of dissatisfaction because no description or place for it was to be found in the writers on natural history, received its character from his hands. His task was that of Adam, to name the animals as they passed before him.

His modesty at first induced him to attempt few and isolated species and departments of small extent; and as time gave him experience of his powers he ventured farther. A few scattered insects and shells, ascertained to be undescribed with great labour and precaution, first received their characters and names from him—Next, he undertook the Crustacea of the United States, which he described and classified. He then extended his labour to a larger number of shells, selecting those of the land and the fresh waters. Next came the detached and still limited groups of the Thysanourae, the Arachnides and the Myriapoda; and then he finally entered among the vast masses of the true insects. His publications in this field of toil principally relate to the Coleoptera, Diptera, Hemiptera, Neuroptera and Hymenoptera. His account of the Neuroptera is liable to be overlooked from the circumstance of its publication in a journal of medicine instead of one devoted to natural history. When the late Dr. Godman published the Western Quarterly Reporter, at Cincinnati, Ohio, he was desirous of enriching his work with contributions on natural science, and was gratified with the receipt of this valuable paper from Mr. Say, without which our large and conspicuous insects of this order would remain undescribed. Our deceased fellow member had now achieved so much of his task that he could afford to be desultory; and his pieces from this period assume a more diversified character. His monograph on the genus *Cicindela* is much admired. His share in the history of the two expeditions by Major Long, is truly multifarious. Besides the departments which he considered peculiarly his own, it embraces, as we have already had occasion to observe, a very large amount of matter foreign to his ordinary habits of study, and requiring a different manner of composition. We may here, without extravagance, admire the talents of the man, who, in a species of writing which for many years it had been his persevering study to avoid, should please the public with the fluency and ease of diction, which are found in some popular chapters contributed by him. Some of the most interesting portions are those which describe the manners of the Indians. He is the historian of all the facts that were collected in those districts which he traversed with a small detachment of troops under his separate command; he obtained, although not professing philology, the vocabulary of the Killisno language; and on the expedition to the Sources of St. Peter's River, he made the whole of the botanical collections, which afterwards formed the basis of a memoir appended by the late Mr. De Schweinitz to the

published narrative. In fossil zoology, his description of new species of the Crinoidea is considered highly valuable. Some other matter in this department, in which America until lately presented such a mass of unknown objects, will be found in the catalogue of his papers. Our fellow member, Dr. Morton, informs me that he was himself induced to undertake the study of the New Jersey marl fossils, in consequence of the perusal of Mr. Say's paper treating on that subject, in the 1st and 2d volumes of Professor Silliman's Journal. It would seem that his valuable papers on American shells, published in the New Harmony Disseminator, and communicated to me by the politeness of Mr. Poulson, are in reality very little known to naturalists. Some other publications were made by Mr. Say in that periodical; it appearing to have been his first object in this as in many other instances, to procure a public record of his papers in print, so as to establish his claims to the date of his discoveries, while at the same time he obtained duplicates to transmit to his learned correspondents; leaving it to subsequent times to republish them, and thus secure their wider diffusion and more easy access.

The character of Mr. Say was in every way singularly fitted for the task which he thus made the business of his life. He was gifted with a strong intellect, accurate powers of observation, vast assiduity, a freedom from those unsettled wanderings of the mind which are so frequently the bane of genius, and an enthusiastic attachment to the subject of his studies. Such was the ardour of his perseverance, that for a long period he actually lived at the Academy, sleeping within the walls, and only leaving the institution when necessary to obtain his meals. The hours of refreshment were forgotten, and sleep unhesitatingly sacrificed, not as an occasional exertion, but as a permanent and persevering habit. His extraordinary power of concentrating his industry, had an effect in producing the peculiar style of his pieces. The manner of writing in which he most delighted, was that of the utmost abridgment of which the subject was capable, cutting off every unnecessary word. It was not that he was incapable of a fluent style, for various parts of his writings demonstrate the contrary, such as some of his contributions to the narrative of the Expedition to the Rocky Mountains; but he seemed to think it an injustice to the reader and to science to detain men from knowledge with the smallest redundancy of language. At the same time, this severe judge was far from criticising others with the same rigour which he exercised towards himself; and readily forgave the luxuriance of style in their works. His own manner, when he indulged in his beloved brevity, was certainly liable to the objection of difficulty to untutored readers; but still more, perhaps, to the risk of alarming students by its apparent obscurity, than to the reality, as the knowledge which was requisite was always actually present, though comprised in few words. It is unnecessary to add, that to some profound naturalists this abridged style is a recommendation.

In philosophy he was an advocate for that doctrine which attached exclusive importance to the evidence of the senses. Fact alone was the object which he thought worthy of his researches. Chains of reasoning or general principles he thought so frequently fallacious, as to constitute an employment for the human intellect of secondary and even doubtful utility. We will not here stop to discuss this celebrated opinion.—The influence which it has exerted through the minds of Mr. Say and others has contributed sensibly, within the city of Philadelphia, to stimulate our youth to the pursuit of science in preference to that of literature.—It cannot therefore be considered as acting injuriously to this Academy, which should be considered as a great school of observation and inductive science.

The natural temper of our deceased member was one of the most amiable ever met with. The phrase was



frequent in the mouths of his intimates, that "it was impossible to quarrel with him." His great respect for his parents, and his compliance with their wishes, have been already mentioned. He was repaid, notwithstanding his retired life and his exclusive devotion to science, by a singular strength of attachment on the part of his friends; and we have already spoken of the confidence of Mr. Maclure. His modesty was so retiring, and the wish that he frequently expressed "to save trouble" to others so great, that to men in the habit of living much in the world they might perhaps appear incredible. The contrast of these with the manners of the times was occasionally so remarkable as almost to amount to eccentricity and satire.

To those who have not seen him, it may be interesting to add, that he was tall, muscular, but spare, apparently endowed, before his health was injured by repeated illness, with considerable strength. This enabled him better to struggle with the fatigues of toilsome journeys and the wasting inactivity of study. His complexion was dark, with black hair. The best likeness of him is a small one, by Mr. Wood, in the possession of his family.

In closing an account of the life of our deceased founder, it seems consonant with the spirit of our institution to make but little comment. The fact and truth of which it is our habit to be in search, shine with as much clearness and instruction in the contemplation of a life passed in the augmentation of natural science, as they do in any other department of knowledge. The institution which is now lamenting his death, is in a great measure the work of his hands. We can say, as was written of the architect of a splendid temple, "Si monumenta queris, circumspice."

*Extracts from the constituent Minutes of the Academy of Natural Sciences.*

PHILADELPHIA, Saturday Jan. 25, 1812.

John Speakman, Esq. having taken the chair, Camillus Macmahon Mann, Doctor of Medicine, was called by the meeting, unanimously, to discharge the duties of Secretary.

Present, besides the said Chairman and Secretary.

Gerard Troost, Esq. Med. Doctor,

John Shinn, jr. Esq.

Jacob Gilliams, Esq.

Nicholas Parmantier, Esq.

Who conjointly having proceeded to initiatory business, as well for themselves, as for Mr. Thomas Say, absent.

Resolve—The gentlemen present agree to form, constitute and become a Society for the purpose of occupying their leisure occasionally, in each other's company, on subjects of natural science, interesting and useful to the country and the world, and in modes conducive to the general and individual satisfaction of the members, as well as to the primary object, the advancement and diffusion of useful, liberal, human knowledge. And the said gentlemen present pledge themselves to the formation and persevering support of this said intended society accordingly.

Determined.

Signed by Thomas Say, Camillus M. Mann, Sec'y.  
John Speakman, N. I. Parmantier,  
G. Troost, J. Gilliams.

PHILADELPHIA, March 17, 1812.

*\* Academy of Natural Sciences.*

Thomas Say, Gerard Troost, Jacob Gilliams, John Speakman, Nicholas Parmantier, John Shinn, jr. and Camillus Macmahon Mann—Present—all the foundation members.

\* The name "Academy of Natural Sciences," was first assumed at this meeting.

Every individual of the present members, founders of the Academy of Natural Sciences, has equally felt that an association of this nature, tendency, operation and bearing, free and perpetually occlusive of political, religious and national partialities, antipathies, preventions and prejudices, is necessary for the easier and more perfect acquirement and the better progress of natural knowledge, wherever it may be desired.

We will contribute to the formation of a Museum of Natural History, a Library of Works of Science, a Chemical Experimental Laboratory, an Experimental Philosophic Apparatus, and every other desirable appendage or convenience for the illustration and advancement of natural knowledge, and for the common benefit of all the individuals who may be admitted members of our institution in the manner herein to be stated, or stated already.

Camillus M. Mann, *Secretary.*

Signed by Thomas Say, N. I. Parmantier,  
J. Gilliams, G. Troost,  
John Speakman,

**LIST OF THE PAPERS AND OTHER WORKS OF MR. SAY, SO FAR AS ASCERTAINED.**

[*Journal of the Academy of Natural Sciences.*

**VOL. I.**

Description of Seven Species of American Fresh Water and Land Shells, not noticed in the systems.

Descriptions of several new species of North American Insects.

Some account of the Insect known by the name of the Hessian Fly, and of a parasitic Insect that feeds on it.

On a new genus of the Crustacea and the species on which it is established.

An account of the Crustacea of the United States.

Descriptions of New Species of Land and Fresh Water Shells of the United States.

Account of two New Genera, and several New Species of Fresh Water and Land Shells.

Notes on Professor Green's paper on the Amphibia. Observations on some of the Animals described in the Account of the Crustacea of the United States.

Appendix to the Account of the Crustacea.

Description of a New Genus of Fresh Water Bivalve Shells.

Description of three New Species of the Genus *Nassa*.

**VOL. II.**

Descriptions of the Thysanouræ of the United States.

Descriptions of the Arachnides of the United States.

Descriptions of the Myriapodæ of the United States.

Descriptions of Univalve Shells of the United States.

Account of some of the Marine shells of the United States.

Description of a Quadruped belonging to the Order Rodentia.

On a South American species of *Cestrus*, which inhabits the human body.

Descriptions of Univalve Terrestrial and Fluvialile Shells of the United States.

**VOL. III.**

Descriptions of Dipterous Insects of the United States.

Descriptions of Coleopterous Insects collected in the Expedition to the Rocky Mountains. [229 pages, 356 species. Continued into vol. iv.]

**VOL. IV.**

Account of some of the Fossil shells of Maryland.

On the Fresh Water and Land Tortoises of the United States.

Description of three New Species of Coluber inhabiting the United States.

On two Genera and several Species of Crinoidea.

Descriptions of New Hemipterous Insects collected in the expedition to the Rocky Mountains.

A new Genus of Mammalia proposed, and a description of the species upon which it is founded. By T. Say and George Ord.

Description of a New Species of Mammalia, whereon a New Genus is proposed to be founded. By T. Say and George Ord.

On a new species of *Modiola*.

#### VOL. V.

Descriptions of New Species of Hister and Holohepta inhabiting the United States.

Descriptions of some New Species of Fresh Water and Land Shells of the United States.

On the Species of the Linnæan Genus *Asterias* inhabiting the coast of the United States.

Descriptions of New Species of Coleopterous Insects inhabiting the United States.

Descriptions of Marine Shells recently discovered on the coast of the United States.

On the Species of the Linnæan Genus *Echinus* inhabiting the coast of the United States.

Descriptions of North American Dipterous Insects.

Descriptions of New North American Hemipterous Insects, belonging to the first family of the section Homoptera of Latreille.

*Contributions of the Mæclurian Lyceum of Philadelphia.*

Remarks on some Reptilia of Dr. Harlan.

Note on Le Conte's Coleopterous Insects of North America.

Descriptions of New Species of Hymenoptera of the United States. [Not completed.]

*Annals of the Lyceum of Natural History of New York, Vol. I.*

Descriptions of New American Species of the Genera *Buprestis*, *Trachys* and *Elater*.

*Western Quarterly Reporter of Medical, Surgical, and Natural Science; edited by John D. Godman, M. D., Vol. II.*

Descriptions of Insects belonging to the Order Neuroptera, Linn., Latreille. Collected by the Expedition under the command of Major Long, [to the Rocky Mountains.]

*Siliman's Journal, Vol. I.*

Notes on Herpetology.

Observations on some species of Zoophytes, Shells, &c. principally fossil. [Continued into vol. ii. Contains the first account of New Jersey Marl Fossils.]

*Philosophical Transactions of the Royal Society, 1819.*

On the Genus *Ocythoe*; being an extract of a letter from Thomas Say, Esq. of Philadelphia, to Wm. Elford Leach, M. D. F. R. S.

*American Philosophical Transactions, Vol. I. New Series.*

A Monograph of North American Insects of the Genus *Cicindela*.

#### VOL. II.

Descriptions of Insects of the families of Carabici and Hydrocanthari of Latreille, inhabiting North America.

#### VOL. IV.

Descriptions of New North American Insects, and Observations upon some already described. [Part of this paper was also printed in the New Harmony Disseminator.]

*In the "Account of an Expedition from Pittsburg to the Rocky Mountains, performed in the years 1819 and 1820."*

The whole department of Zoology; with the addition of various Memoirs, Narratives and Notes, incorporated into the body of the work. Besides what is published, it will be remembered that Mr. Say was robbed of a large mass of collections and papers.

*In the "Narrative of an Expedition to the Source of St. Peter's River, Lake Wannepek, Lake of the Woods, &c. &c. performed in the year 1823."*

The notes of all that relates to the Zoology and Botany of the country traversed; as well as much of the matter relating to the Indians. Also, the greater part of the Appendix, viz: the article Zoology, in 124 pages; the specimens and other materials, which enabled Mr. de Schweinitz to compose the article Botany; and the Killisteno portion of the Vocabularies of Indian Languages.

*In the American edition of Nicholson's Encyclopædia.*

The new modelling of the whole department of Natural History, with the addition of all the American matter, including an extensive account of American Insects and Shells.

*American Entomology*, or Descriptions of the Insects of North America, illustrated by coloured figures from original drawings executed from Nature. Philadelphia Museum, vol. i. 1824; vol. ii. 1825; vol. iii. 1828; Glossary, 1825.

*American Conchology*, or Descriptions of the Shells of North America, illustrated by coloured figures, from original drawings executed from Nature. Six numbers and a Glossary. New Harmony, Indiana, 1830—1834.

*Descriptions of New Species of Curculionites of North America*, with observations on some of the species already known. New Harmony, Indiana, July, 1831.—Pamphlet.

*In the New Harmony Disseminator, (communicated by C. A. Poulson, Esq.)*

July 29, 1829.—Descriptions of some new Terrestrial and Fluvialile Shells of North America. Continued to Nov. 18th. Nine articles.

Dec. 30.—New Terrestrial and Fluvialile Shells of North America. Continued to January 29. Three articles.

We are informed, that other publications were made by Mr. Say in the Journal last named; but of these we have, as yet, been unable to obtain a list.

We understand that a lot has been purchased in this borough, for the erection of a large steam machine shop, for the manufacture of steam engines, rail road cars &c. We also learn that two enterprising young men intend erecting, early in the spring, a steam grist mill in this borough.—*Miners' Journal*.

**HEALTH OF POTTSVILLE.**—It is a remarkable fact, ascertained by the person who took the census, that there were on Tuesday last, only three persons confined to their beds with sickness, in the borough of Pottsville, containing a population upwards of three thousand souls.—And there is not a single deaf and dumb or blind person in the borough. The above facts are worthy of record.—*Id.*

## STATEMENT OF DEATHS, WITH THE DISEASES AND AGES,

In the City and Liberties of Philadelphia, during the year 1834.

DISEASES.	Males.	Females.	Boys.	Girls.	Under 1 yr.	1 to 2.	2 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 to 100.	100 to 110.	Total.
Apoplexy	46	30	0	2	0	1	0	0	0	1	9	10	14	12	19	8	2	0	0	76
Abscess	7	5	5	2	3	1	1	0	1	1	0	2	1	1	0	0	1	0	0	13
Aneurism of Heart and Aorta	1	2	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	3
Carotid Artery	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Asphyxia	5	3	5	2	7	0	0	0	0	0	0	1	0	0	0	0	0	0	0	8
Asthma	6	4	0	1	0	0	1	0	0	0	0	0	4	1	2	2	0	0	0	10
Atrophy	57	39	54	32	48	24	10	4	0	0	1	3	2	0	1	3	1	0	0	96
Angina Pectoris	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
Amenorrhœa	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Bronchitis	69	52	59	43	56	21	16	8	0	1	1	0	2	2	5	3	1	0	1	121
Burns	9	18	9	13	2	4	6	4	4	2	1	1	3	0	0	0	0	0	0	27
Consumption	322	314	41	61	23	20	14	8	3	34	190	143	90	53	34	18	5	1	0	636
Croup	47	34	47	32	32	16	22	9	0	0	0	0	2	0	0	0	0	0	0	81
Cramp of the Stomach	2	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
Convulsions	157	120	143	114	300	23	25	4	2	3	4	10	3	3	0	0	0	0	0	277
Puerperal	0	3	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	3
Cancer	9	26	2	1	0	0	1	0	1	1	2	5	8	9	5	3	0	0	0	35
Cachexia	2	3	0	0	0	0	0	0	0	0	0	0	0	1	3	0	1	0	0	5
Caries of the Spine	2	0	2	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
Congestion	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
of the Brain	19	18	7	8	10	1	1	1	1	1	5	7	6	2	1	1	0	0	0	37
Lungs	6	2	3	0	2	1	0	0	0	0	3	0	1	0	0	1	0	0	0	8
Child-bed	0	5	0	0	0	0	0	0	0	0	3	1	1	0	0	0	0	0	0	5
Casualties	21	3	7	0	1	0	3	1	1	1	3	7	3	1	2	1	0	0	0	24
Concussion of the Brain	1	1	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	2
Spine	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Colic	3	2	1	1	2	0	0	0	0	0	2	0	0	0	0	1	0	0	0	5
Chorea	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Compression of the Brain	1	1	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
Cholera	100	51	7	5	0	1	4	3	2	2	28	51	37	26	14	2	1	0	0	151
Morbus	40	13	6	1	1	0	1	2	1	2	13	11	1	4	2	2	2	0	0	53
Infantum	206	171	206	171	248	101	25	5	0	0	0	0	0	0	0	0	0	0	0	377
Dropsy	44	59	16	12	4	2	7	7	1	7	7	18	12	13	12	12	1	0	0	103
of the Brain	100	98	99	97	80	59	36	16	5	0	1	1	0	0	0	0	0	0	0	198
Breast	26	25	4	8	2	1	4	2	1	8	9	4	8	6	4	0	0	0	0	51
Pericardium	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Debility and Decay	109	98	80	58	127	5	5	0	0	1	3	7	8	8	15	18	7	2	1	207
Disease of the Brain	14	13	10	8	6	3	3	3	2	1	3	1	2	2	1	0	0	0	0	27
Throat	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Chest	2	3	1	1	1	1	0	0	0	0	1	0	0	0	0	0	0	1	0	5
Lungs	3	1	2	1	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4
Heart	15	14	1	2	2	0	0	0	1	0	4	8	1	6	2	5	0	0	0	29
Stomach	2	4	0	0	0	0	0	0	0	0	1	1	1	0	2	1	0	0	0	6
Liver	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Kidney	0	2	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	2
Bowels	2	3	2	2	2	0	2	0	0	0	0	1	0	0	0	0	0	0	0	5
Spine	1	4	0	3	2	0	0	0	0	1	0	1	0	0	0	0	1	0	0	5
Hip	3	1	2	1	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	4
Knee Joint	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Uterus	0	5	0	0	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	5
Bladder	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
Glands	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Rectum	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Drowned	53	7	17	1	0	0	2	6	7	3	14	13	12	2	1	0	0	0	0	60
Dysentery	42	28	22	13	13	9	5	3	0	6	6	6	6	5	8	3	1	0	0	70
Diarrhœa	60	63	33	40	41	17	5	6	2	2	4	15	7	5	8	6	4	0	1	123
Drinking Cold Water	4	0	1	0	0	0	0	0	0	1	0	0	0	2	0	1	0	0	0	4
Diabetes	2	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
Epilepsy	5	7	3	5	2	1	1	2	1	1	2	1	0	0	1	0	0	0	0	12
Erysipelas	10	10	5	2	5	2	0	0	0	0	2	3	2	2	2	2	0	0	0	20
Enlargement of the Heart	6	2	3	0	2	0	0	0	0	1	2	1	0	1	0	1	0	0	0	8
Breasts	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Spleen	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Eruptions	3	1	3	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Exposure to Cold	2	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
Effusion on the Brain	6	1	0	0	0	0	0	0	0	0	2	1	2	2	0	0	0	0	0	7

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## STATEMENT OF DEATHS—CONTINUED.

DISEASES.	Males.	Females.	Boys.	Girls.	Under 1 yr.	1 to 2.	2 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 to 100.	100 to 110.	Total.
Effusion on the Lungs	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Excessive heat	13	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Fever	23	12	15	4	6	4	4	3	2	0	2	2	7	6	1	0	0	0	0	35
Bilious and Remittent	25	33	11	15	2	3	6	4	3	8	12	8	2	2	2	3	0	0	0	58
Intermittent	2	1	1	0	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0	3
Typhus and Nervous	38	23	10	5	0	1	1	4	6	3	25	10	8	3	1	0	1	0	0	61
Scarlet	38	45	36	42	9	15	37	15	2	0	2	2	1	0	0	0	0	0	0	83
Puerperal	0	19	0	2	0	0	0	0	0	2	9	6	2	0	0	0	0	0	0	19
Hectic	4	1	1	0	0	0	0	0	0	1	0	3	0	1	0	0	0	0	0	5
Brain	1	2	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	3
Worm	1	1	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Congestive	1	1	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Peritoneal	3	2	0	1	0	0	1	0	0	0	1	1	0	1	1	0	0	0	0	5
Inflammatory	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Fracture	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
of the skull	3	1	0	1	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0	4
Fungus Hæmatodes	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2
Gout	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Gravel	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Hæmorrhage	18	16	7	4	8	0	2	0	0	1	5	5	10	2	1	0	0	0	0	34
Whooping Cough	26	22	26	22	23	9	14	1	0	1	0	0	0	0	0	0	0	0	0	48
Hernia	3	3	1	0	0	0	1	0	0	0	1	0	1	0	2	1	0	0	0	6
Hydrophobia	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Inflammation	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	2
of the Brain	65	59	45	29	24	18	16	4	7	5	6	9	9	3	2	1	0	0	0	104
Throat	12	7	6	6	3	2	4	2	1	0	3	2	0	2	0	0	0	0	0	19
Wind-pipe	1	1	1	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
Lungs	90	79	52	56	56	21	17	7	2	5	16	9	5	6	17	4	3	1	0	169
Breast	9	6	8	6	5	4	2	3	0	0	0	0	0	0	0	1	0	0	0	15
Heart	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Pericardium	1	3	1	2	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	4
Liver	20	17	4	1	3	0	1	1	0	0	6	9	6	5	6	0	0	0	0	37
Stomach	19	22	9	6	8	1	1	0	0	5	4	7	2	4	5	2	2	0	0	41
Bowels	62	49	32	20	26	10	8	3	3	2	16	19	6	8	6	3	1	0	0	111
Kidney	2	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3
Uterus	0	2	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
Bladder	3	3	0	1	0	1	0	0	0	0	0	2	1	0	1	1	0	0	0	6
Mucous Membrane	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Spinal Marrow	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Veins	2	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
Introsusception	0	2	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
Inanition	1	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Intemperance	19	9	0	0	0	0	0	0	0	0	5	10	10	3	0	0	0	0	0	28
Insanity	1	3	0	1	0	0	0	0	0	1	2	0	0	0	0	1	0	0	0	4
Irritation of the Brain	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Spinal Marrow	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Intestines	2	2	2	2	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
Injury of the Brain	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Abdominal Viscera	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Influenza	2	1	1	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	3
Jaundice	6	4	4	2	3	2	1	0	0	0	0	1	2	0	0	1	0	0	0	10
Laudanum to excess	3	2	2	1	3	0	0	0	0	0	1	0	0	0	1	0	0	0	0	5
Locked Jaw	7	2	3	1	1	0	0	1	0	2	1	1	2	0	1	0	0	0	0	9
Mortification	17	7	7	3	3	4	1	1	0	1	3	3	4	1	2	1	0	0	0	24
Measles	3	4	3	4	1	0	5	1	0	0	0	0	0	0	0	0	0	0	0	7
Mania a Potu	76	14	0	0	0	0	0	0	0	0	18	36	20	12	4	0	0	0	0	90
Malformation	7	5	7	5	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Murdered	2	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	2
Necrosis	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Old Age	23	45	0	0	0	0	0	0	0	0	0	0	0	5	14	36	13	2	0	68
Ossification of the Heart	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
Arteries	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Obst'n. of Liver & bronchii	1	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Palsy	22	24	0	1	1	0	0	0	0	0	3	3	3	9	12	6	8	1	0	46
Pleurisy	5	6	0	2	1	0	0	0	0	1	1	2	1	2	3	0	0	0	0	11
Purpura Millaris	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Pempighus	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Polysarcia	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1

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## STATEMENT OF DEATHS—CONTINUED.

DISEASES.	Males.	Females.	Boys.	Girls.	Under 1 yr.	1 to 2.	2 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 to 100.	100 to 110.	Total.
Poison . . . . .	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Rheumatism . . . . .	5	7	1	2	0	0	0	0	1	2	2	2	3	1	0	1	0	0	0	13
Rickets . . . . .	1	1	1	1	1	0	0	1	0	0	2	2	0	0	0	0	0	0	0	2
Rupture of Blood Vessel . . . . .	2	3	0	0	0	0	0	0	0	0	1	0	2	1	1	0	0	0	0	5
Aorta . . . . .	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Intestines . . . . .	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Still Born . . . . .	174	134	174	134	308	0	0	0	0	0	0	0	0	0	0	0	0	0	0	308
Small Pox . . . . .	118	77	69	57	47	16	36	14	7	6	45	14	6	3	0	0	0	0	1	195
Scrofula . . . . .	5	2	3	2	2	0	0	1	0	2	1	1	0	0	0	0	0	0	0	7
Syphilis . . . . .	3	6	1	2	1	0	1	0	0	1	1	5	0	0	0	0	0	0	0	9
Softening of the Brain . . . . .	2	2	0	0	0	0	0	0	0	0	1	2	2	0	0	0	0	0	0	5
Suicide . . . . .	8	1	1	0	0	0	0	0	0	1	3	2	3	0	0	0	0	0	0	9
Sudden . . . . .	11	10	3	3	5	0	0	1	0	0	2	2	4	2	1	2	2	0	0	21
Suffocation . . . . .	5	1	2	1	3	0	0	0	0	0	0	1	1	0	1	0	0	0	0	6
Scirrhus . . . . .	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
of the Liver . . . . .	1	3	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	4
Stomach . . . . .	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Pylorus . . . . .	2	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2
Uterus . . . . .	0	2	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2
Prostate Gland . . . . .	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Stroke of the Sun . . . . .	7	1	1	0	0	0	0	0	0	1	1	3	2	0	1	0	0	0	0	8
Sarcoma, Medulary . . . . .	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Stricture of the Colon . . . . .	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Thrush . . . . .	4	4	4	4	7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	8
Teething . . . . .	3	7	3	7	7	2	1	0	0	0	0	0	0	0	0	0	0	0	0	10
Tumour, Fungous . . . . .	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
on the Throat . . . . .	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Ulceration . . . . .	2	2	2	0	1	0	1	0	0	0	1	0	0	0	0	0	1	0	0	4
of the Mouth . . . . .	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Throat . . . . .	2	2	1	0	1	0	0	0	0	0	2	0	1	0	0	0	0	0	0	4
Lungs . . . . .	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Stomach . . . . .	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
Bowels . . . . .	1	4	1	2	0	1	2	0	0	0	1	0	0	0	1	0	0	0	0	5
Sacrum . . . . .	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Unknown . . . . .	55	50	30	29	50	2	5	0	1	10	12	3	12	7	0	2	0	0	0	105
Varioloid . . . . .	14	3	6	2	1	2	2	1	1	8	1	0	0	0	0	0	0	0	0	17
Vomiting . . . . .	2	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2
Worms . . . . .	4	2	0	2	0	3	1	2	0	0	0	0	0	0	0	0	0	0	0	6
Wounds . . . . .	9	1	1	0	0	0	0	0	0	1	2	1	3	2	1	0	0	0	0	10
<b>Total</b>	<b>2810</b>	<b>2265</b>	<b>1526</b>	<b>1258</b>	<b>1578</b>	<b>442</b>	<b>385</b>	<b>168</b>	<b>81</b>	<b>130</b>	<b>559</b>	<b>547</b>	<b>394</b>	<b>279</b>	<b>244</b>	<b>149</b>	<b>91</b>	<b>21</b>	<b>5</b>	<b>5073</b>

Of the above there were Males of 20 years and upwards, 1284; under 20 years, 1526; Females of 20 years and upwards, 1,005; under 20 years, 1258.

There were 556 returns received at the Health Office, of persons who died in the Alms House of the City and Districts during the year; 519 People of Colour are included in the total number of deaths.

Agreeably to returns made at the Health Office and collected from 151 Practitioners of Midwifery, there were born in the City and Liberties, during the year 1834, 3937 Male, and 3635 Female children, making the total number of Births 7572, leaving a difference between the Births and Deaths of 2499.

## DEATHS IN EACH MONTH OF THE YEAR.

	Adults.	Children.	Total.
January . . . . .	200	212	412
February . . . . .	160	194	354
March . . . . .	181	234	415
April . . . . .	160	132	312
May . . . . .	154	167	321
June . . . . .	121	210	331
July . . . . .	261	506	767
August . . . . .	163	311	474
September . . . . .	219	214	433
October . . . . .	347	242	589
November . . . . .	146	165	311
December . . . . .	177	177	354

2289

2784

5073

By Order of the Board of Health.

WM. A. MARTIN, Clerk.

## HISTORICAL NOTES.

By REDMOND CONYNGHAM.

*(Continued from page 118.)*

When William Penn was preparing to return to Europe, he sent for the Chiefs of the Conestoga and Susquehanna Indians, and renewed his promise of protection. This occurred in 1701, therefore the Chief of the Conestoga Indians who addressed Sir William Keith in 1721, must have had a perfect recollection of all the circumstances attending the conference in 1701. In Proud's History of Pennsylvania, page 326, there is a note which is inaccurate. "The Conestoga Indians are the remains of a Tribe of the Six Nations." What follows is correct. "On the first arrival of the English in Pennsylvania, messengers from this Tribe came to welcome them with presents of venison, corn, and skins; and the whole Tribe entered into a Treaty of Friendship with the first Proprietary, *William Penn, which was to last as long as the Sun should shine or the waters run into the rivers.*"

The lines in italics may have been used in the Great Treaty, as the expression was a favorite one with the Indians. The Delawares on one occasion say "This Treaty shall continue as long as the Sun shall rise or the waters flow."

The writer of the pamphlet may have been acquainted with the fact that the Conestoga Indians held a conference with Penn's commissioners after their arrival, but entered into the Treaty of Friendship with William Penn only.

"In the latter part of this year, 1682, the Proprietary having finished his business with the Indians, undertook to lay out a plan for the city."

Proud's History, page 233, volume First.

This evidently alludes to the Great Treaty made with the Indians, as that would be his principal business.

By referring to the early histories of the Southern Colonies, it will be seen that in the year 1698 there existed no particular cause to compel the Indians to seek for an asylum in Pennsylvania; but in 1677, 1678, &c, the histories of Carolina and Virginia fully corroborate the statements of the Conestoga Indians, as to the time when they settled within this Province.

The Great Treaty having been made before Philadelphia was laid out, fully confirms public opinion in the conviction that it was made at Shackamaxon.

Have you reason to believe that a Treaty was regularly executed by Penn's commissioners with the Shawanese, before the arrival of William Penn?

It had rather the character of an Indian conference, which afterwards was ratified as a Treaty, at Shackamaxon, by William Penn. By the Shawanese and Delawares, the first was considered as the preliminary, the second as the confirmatory Treaty. When allusion was made to them, it was customary for the warriors of the

Delawares and Shawanese to designate them as "the first Treaties made with Onas."

Proud's History of Pennsylvania, volume First, see note at the bottom of page 214, where part of Teedescung's speech is given.

"The first Treaties of Friendship made by Onas our Great Friend, deceased, with our Forefathers, when himself and his people first came over here."

Tradition tells us, that the commissioners of William Penn resided at Shackamaxon, and that the Indian conference with Markham, was held under the Elm in the summer of 1682, at Shackamaxon. If this be correct, there can be no doubt of the second conference having taken place on the same spot, for the Indians would select it in preference to any other situation, especially on account of the Tree. This explains why the Treaty was made under the Tree, in December, with William Penn; as the Tree would naturally be looked upon by the Indians with awe and reverence, and be considered by them as rendering the Treaty indissoluble.

The Indians who resided at Conestoga having removed from Virginia in the year 1677, still continued to hunt in their old ground, which caused a disagreement between them and the Southern Indians, in the year seventeen hundred and nineteen, and the loss of their king in a skirmish; they sent a deputation to Governor Keith, to request his protection. The Governor in the spring of 1721, went to Virginia to consult with the Governor of that state, as to the best plan for the security or common safety of the Indians; on his return to Philadelphia, he sent to the Indians at Conestoga a message by John Cartledge, that he would meet them in Council on the fifth of July, and he sent a similar message by James Le Torte, to the Five Nations. In the afternoon of that day, Governor Keith held a conference with the Shawanese Chiefs of Conestoga Indians, whom he called *his children*, and the deputies of the Five Nations, whom he called *their Friends*, at Conestoga.

Governor Keith reminded the Conestoga Indians, that their oppressor, Nathaniel Bacon, had fallen a victim to his passions, in 1677, and that the present Governor of Virginia was their friend, and that "he requested them not to cross the Potomac in future, and that his Indians should not hereafter, disturb you in your hunting grounds." "I have made this agreement which you must keep. It is but a few years since William Penn spoke to your Nation in Council, which your Chiefs must well remember. Onas gave you good counsel, which you must never forget." "I leave you, and will see that you suffer no hurt, for you are my children. I will speak to you to-morrow in Council, and on the day after to the warriors of Seneca, Onondago, and Cayouga."

A Conestoga Chief replied to Sir William Keith.—"The Roots of the Tree of Friendship are planted deep, the tree top is high, the Branches spread in warm weather when the weary Indian sleeps beneath its shade, so is the Indian protected by Onas when danger

threatens from the deep and dark thicket." "The Fire water weakens our warriors, we are become women." "We have not forgotten Onas, he promised us protection at Shackamaxon."

Governor Keith was not apprehensive of any danger from the Conestoga Indians, but as this was the first time he was to meet the chief warriors of the Iriquois, he took the precaution of having seventy horsemen well mounted and well armed, and on his return to Philadelphia, was received with much pomp by the Mayor and Aldermen, accompanied by two hundred citizens on horseback.

On pages 130 and 132 of Proud's History of Pennsylvania, will be found the proceedings in Council, on July 6th, 7th, and 8th, 1721. On page 136, Sir William Keith refers to the Treaty at Shackamaxon.

July 5th, 1721. The lands contiguous to the Indian town of Conestoga were described as exceeding rich, fine farms, orchards of fruit, wheat, barley, rye, flax, and hemp, raised in abundance without the aid of any manure.

#### PROVIDENTIAL ESCAPE.

In the year 1755, the Moravian Missionaries, Christian Seidel and Henry Frey, visited the Indians at Wyoming; on returning by the warriors path, as they descended Nescopeck Mountain in consequence of many trees having been blown down by a recent storm, they wandered from the path, and though at the time they suffered from anxiety, yet to this circumstance they were preserved from certain death.

A number of Indians had planted themselves in ambush in a laurel swamp, at the foot of the mountain, with the intention to tomahawk them, but the Christian Brethren missing the path, were graciously preserved. The Brethren found the path again near where Conyngham has since been built, and happily reached Guadenhatton in safety.

See Loskiel's Indian Missions, page 161, Chapter Twelve.

#### THE GREAT ELM.

Frequent allusions are to be found in Indian speeches to this Tree, as "The Tree of Friendship," "Tree of Peace," "The Great Tree," &c.

One of the most striking is contained in the speech of Sassoonan, a Chief of the Delawares, in 1715.—"Let the Peace be so firm, that you and us joined hand in hand, even if the *greatest Tree* falls, it shall not divide us."

A Conestoga Chief in 1701, said "As long as the Tree stands the path will be open and the hatchet unstained." Again—"Peace shall last whilst the Tree stands." "The path of the Indians is open to the Tree." "The poor Indian hunted for shelter but could find none; he went to the Great Tree, and found a resting place." "The Branches of the Great Tree

hang over the path of the Indian and guard him from danger."

These references are sufficient to convince the most incredulous, that the Great Treaty with William Penn was made by the Indians at Shackamaxon.

#### THE ELM TREATY.

To E. C. Reigart, Esquire, member of the House of Representatives at Harrisburg, I am indebted for the following information.

"I find a Treaty was made on the fifteenth of June, 1682, at the house of Captain Lasse Cock, for land on the Delaware, extending westward a considerable distance, beginning at a White Oak on land in the tenure of John Wood, and by him called Grey Stones. The Indians were of the Delaware Nation. Captain Lasse Cock resided at Shackamaxon."

I sent a copy of this Treaty a few years since, to William Rawle, Esquire, President of the Historical Society of Pennsylvania.

In consequence of the heat and number of persons whom the house could not accommodate, the Indian conference was held under the Elm Tree, and the Treaty signed in the house of Captain Lasse, or Captain Lasey Cook.

Compare the following extract from a speech of a Conestoga Indian, with an extract from a speech of William Penn to the Indians at Shackamaxon, under the Elm Tree.

"The Governor of Virginia said he was our father, he called us his children; he chastised us, and we called on our Indian brethren, but they would not hearken.—We left our hunting ground.—We came to Conestogue.—We formed a chain of Friendship with Onas; if the Tree should fall it would not break a link."

Gordon's History of Pennsylvania, page 76.

"He would not, like the people of Maryland, call them his children or his brethren; for some parents chastise their children too severely, and brethren would disagree; nor would he compare their friendship to a chain which the rain might rust, or the fall of a Tree destroy."

Substitute Governor of Virginia or people of Virginia for people of Maryland, and the language of William Penn would be such as he probably used. Let it be borne in mind, that Nathaniel Bacon in Virginia in the year 1676, created such alarm among the Indians, that about sixty families removed to the Susquehanna, and settled at Conestogue.

A note, page 127 of Watson's Annals, says, "There is a deed from Governor Henoyon of New York of the year 1664, granting to Peter Cock his tract then called Shackamaxon." On the same page will be found "after the Treaty was held, William Penn and the Friends went into the house of Lasey Cock."

Among the Magistrates appointed by Governor Andross, for one year, for the up river jurisdiction, were Peter and Earnest Cock, 1664, 5. Peter Cock then resided at Shackamaxon.

## POTTSVILLE—1835.

The information which we publish below concerning the population of this place will doubtless prove gratifying and acceptable to the majority of our readers.—The statement is the result of an actual enumeration of the inhabitants, made by the gentleman who was employed to take the census of 1830 in this county. The total number of resident population in 1830 was 2424, and the total number at present, as appears below, is 3117, showing an increase since that period of 693.—This result is certainly greater than we anticipated. With every allowance for the comparatively small degree of mortality, owing to the healthiness of our situation, and the rapid increase of births owing to the well known salubrity of our mountain air, still when we reflected upon the extent of emigration, we were not prepared to anticipate the result disclosed. The births have been strikingly numerous, as will be evident by an inspection of the table below, showing the population classed according to their respective ages. In 1825 our population did not exceed 300 persons. It will be seen that the number of males and females is nearly equal in our borough—an unusual circumstance in a new place. Our neighbors abroad who have been accustomed to hear so much about our declining situation, and to hear the language of Virgil respecting Troy applied to us, "*fuit Illium.*"

"Troy is no more—her glories now are gone,"

will be surprised to learn that Pottsville may still count no less than three thousand one hundred and seventeen inhabitants! And also that the prospect of her future increase is in the highest degree flattering, because her business prospects were never more so in all its various branches. In addition, the rising generation are truly multitudinous, and (under Providence) it is difficult to foretell to what incalculable extent these will continue henceforward to swell the number of our population. Let us hear no more, therefore, of the decline of Pottsville. The time has arrived when she may be said to have arisen, like the Phoenix, from her ashes. A few more years and she will be second to no inland town within the limits of Pennsylvania. For if, while struggling under the most unfavorable circumstances for her trade and industry, she has not only maintained her ground but actually gone on increasing in numbers—what may we not expect of her under propitious auspices.

	Males.	Females.	Total.
There are under			
5 years.	277	307	584
between 5 and 10.	204	197	401
10 15	155	164	319
15 20	111	169	280
20 30	353	315	668
30 40	259	208	467
40 50	90	87	177
50 60	53	38	91
60 70	12	18	30
70 80	3	5	8
80 90	2	3	5
	1519	1511	3030
Free white males,			1519
Free white females,			1511
To which must be added			
Free coloured males,			39
Free coloured females,			48
Total population,			3117

Of the above number there are 247 foreigners not naturalized.

We also give below the population of Mount Carbon, which may be considered a part of Potts-

ville, though not embraced within the corporate limits.

## MOUNT CARBON.

	Males.	Females.	Total.
Under 5 years	21	17	38
between 5 and 10	5	10	15
10 15	5	12	17
15 20	13	9	22
20 30	37	19	56
30 40	20	13	33
40 50	7	4	11
50 60	7	2	9
60 70	3	1	4
	118	87	205
Free white males,			118
Free white females,			87
Free coloured males,			5
Free coloured females,			3
Total,			213
Of the above number there are 30 foreigners not naturalized.			
Total population of Pottsville,			3117
do do Mount Carbon.			213
			3330

The following statement gives the different occupations of the inhabitants of Pottsville—it only includes the heads of families. There are various kinds of business also carried on by single freemen.

2 Lawyers,*	2 Printers,
34 Colliers,	1 Apothecary,
19 Merchants,†	3 Ladies,
20 Innkeepers,	1 Plummer,
9 Masons,	1 Weaver,
19 Boatmen,	6 Physicians,
38 Carpenters,	2 Bakers,
11 Boat Builders,	4 Cabinet Makers,
1 Livery Stable,	1 Dyer,
93 Miners,	2 Hatters,
84 Labourers,	4 Boarding houses,
3 Brick Makers,	1 Vinegar Merchant,
2 Farmers,	2 Barbers,
3 Engineers,	3 Milliners,
15 Blacksmiths,	2 Pedlars,
18 Mantua-Makers,	1 Coachmaker,
2 Painters,	1 Mill-wright,
21 Shoemakers,	3 Saddlers,
1 Miller,	4 Gentlemen,
3 Brewers,	5 Teachers,
15 Washer-women,	2 Tanners,
14 Clerks,	1 Skin Dresser,
2 Wheel-wrights,	4 Justices of the Peace,
3 Beer-houses,	1 Lock Smith,
1 Minister of Gospel,	1 Bottling cellar,
2 Iron Masters,	4 Traders,
2 Weigh Masters,	11 Tailors,
1 Canal toll collector,	1 Drover,
1 Road toll collector,	1 Jeweller,
1 Post Master,	1 Turner,
1 U. S. Mail Contractor,	3 Plasterers,
3 Constables,	2 Tin Smiths,
1 Potter,	3 Tobacconists,
7 Confectioners,	1 Tallow Chandler,
1 Stone Cutter,	1 Soap Boiler,
9 Butchers,	1 English Pensioner,
1 Gunsmith,	

\* There are also 2 Lawyers who are not heads of families.

† There are four merchants who are not heads of families.



## COAL TRADE.

*Third Annual Report made to the Coal Mining Association of Schuylkill County, January, 1835.*

The duty again devolves on the Board of Trade of presenting to the association an account of the past year's operations, and their views of the trade in general.

Three years have elapsed since the Coal Mining Association was organized, and during that brief period, many and great changes have taken place, but the trade has advanced with a sure and steady pace, and has attained that station which warrants us in saying it is now one of the most considerable branches of production, which our state possesses.

The rugged hills of our region have become a busy theatre of active industry, and those tracts which ten years since could afford but a scant support to a few hardy woodsmen, now team with a busy population, who by their industry (that true source of national wealth,) sustained by the enterprise, and funds of citizens drawn hither from other places, are daily extracting from the earth, her hitherto dormant treasures, and forwarding to the sea-board an article, which is destined ere long to supplant, if not entirely supersede the use of wood as a fuel; nor is the comfort and economy of coal as a fuel its only recommendation; already has its safety been so well tested, that insurances on property in our cities have fallen far below their former rates, as fires are found to be less frequent, and as those devastating conflagrations formerly so common in our large cities, are now unknown where our staple is used. The value of property in those places, has, in consequence, increased in the same proportion; in addition to which, every species of property on the line of the canal has risen in value. The property in Philadelphia in the vicinity of the Schuylkill, has advanced beyond the most sanguine expectations of the former holders; and that section of the city which but a few years since was a waste common, is now a busy mart of trade.

To the coal trade in a great measure, (if not entirely) this rise in the value of property is attributable, and when we reflect that the trade is but in its infancy, we may with safety anticipate a still greater advance, and in a short period expect to see both banks of the river, lined with wharves, loaded with the product of our region.

The amount sent from this section during the past season as anticipated in our last report, was less than that of the preceding year, the causes assigned in our last, having, we fear, operated against the trade throughout all its ramifications, as it is found that both the other districts have experienced a like depression.

It was the opinion of the board that with a healthy state of trade, the consumption of the present year would amount to 600,000 tons; they still believe they were warranted in that estimate, by the known consumption of the preceding year, which they were enabled to ascertain from the following facts.

The extreme severity of the winter of 1831-32, caused all the coal then on hand to be consumed, and when the spring opened, the depots were drained and the business commenced with clear wharves.

In the year 1832 there were sent from all sources rising 370,000 tons; the winter of 1832-33 being unusually mild, and the supply large in comparison with former years, it was found there was remaining unsold in all the cities on the 1st April, 1833, 70,000 tons, leaving for the consumption of the preceding year, 300,000 tons; the following year the supply was much greater, and the winter equally as mild as the former, if not more so, and from the best information we have been able to obtain, and that from sources to be relied on, there was on the 1st of April, 1834, unsold in all the cities, 120,000 tons. The following statement will ex-

hibit the amount furnished and consumed in the time above stated.

April 1, 1832—none in market.

Sent this year from all sources	373,871 tons.
Remaining at all points and unsold	70,000

Consumed	303,871
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April 1, 1833—old stock remaining over

Sent this year from all sources	484,986
	554,986

Surplus remaining at all points unsold	120,000
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Consumed	454,986
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April 1, 1834—old stock remaining over

Sent this year from Schuylkill	224,242
Lehigh	106,244
Lackawanna	43,700

In market at the close of navigation	494,186
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By the above it appears that the increased consumption in 1833-34 over that of 1832-33 was more than 43 per cent, and that the whole stock on hand when the season closed, was but 59,200 tons, or 13 3-5 per cent over the actual consumption of that year.

The winters of 1832-33 and 1833-34 were both unusually mild, while thus far in the present winter the cold has been proportionally greater, and should it continue equally cold it is believed the supply on hand will not exceed the demand.

It is not the interest of the collier that a scarcity should be felt at any point, but that there should be a full and ample stock, in order that the consumer may at all times with safety rely on being supplied, as by this means only can we depend on our trade being regular, fluctuations are at all times injurious in every trade, but particularly so to the collier, his grand object should be a regular and steady market, and experience has taught us that low prices and a steady demand are far preferable to high rates with uncertainty. Most of us have witnessed the various fluctuations to which our business has been subjected from its commencement, but in no instance have we known the collier derive a benefit from a sudden rise. His contractors being generally made for given quantities, he is bound to supply at the contracted price, while the dealer, the boatman, and laborers, are the only ones who derive a profit from a sudden demand. We have within the last three years, witnessed the price of freight to Philadelphia vary from 85 cents to \$3 75 per ton, while the price of Coal, as delivered by the colliers on their contracts, was unchanged.

The business requires that the mines should be constantly worked to preserve them in good order for if neglected or suffered to lie idle, dilapidation soon takes place; in addition to which the workings being in what is technically termed surface coal, more faults are to be encountered than may be supposed to exist when the working is below the water level, and the roof more firm, and in consequence the operations must be continued at all seasons and to a certain extent without regard to the demand. Until recently all the coal sent to market from this section was taken from seams above the water level, and even up to this time no fair experiment has been made on what is below.

The consumption along the line of the canal has regularly increased, (excepting for the last year, when, owing to the purchasers having delayed too long, they failed in getting a supply) and the rail roads diverging from Philadelphia have been a means of introducing the

coal into the towns and villages around to a considerable extent.

The following account taken from the books of the Navigation Company, will exhibit the amount consumed along the line from the opening of the canal in 1825, to the present time—

1825	1,450 tons.
1826	3,154
1827	3,372
1828	3,332
1829	5,321
1830	6,150
1831	7,848
1832	13,429
1833	19,432
1834	18,572

Within the last year an improvement has been made in the burning of lime, and the small coal and dirt heretofore deemed as useless, and indeed cumbersome about the mouths of the drifts, is now consumed for that purpose.

There was imported into the United States in the year ending September 30th, 1834, 1,626,185 bushels of Bituminous Coal, being 721,852 bushels less than was imported in the preceding year; the annual exports have not been ascertained correctly, as no return has been made up to this date.

To make up the whole amount of Bituminous coal annually consumed on the seaboard has, for some time, engaged the attention of the Board, and they have made some progress in that investigation, but as their table is not yet fully completed, owing to the difficulty of obtaining correct information from some tracts, they must defer until a future meeting the presenting of that exhibit; in it they wish to present at one view, the whole amount raised and consumed throughout the whole extent of the seaboard, and to give correct data for future estimates. When that is completed they will be able to lay before you an account that will place the trade in such a light as will enable all to form correct conclusions.

The number of Boats on the canal remains about the same as last year, when they were estimated at 570; those then in use had undergone repairs when needed, and were generally in good order; and although but few new ones have been built, they have been still sufficient to supply the place of those that were drawn off as unfit for further service.

The price of freight has been lower throughout the season than was ever before known, but it is believed that the increased facilities offered by the improved state of the canal, and the enlarged size of the boats will enable us to send to market next season without any material *advance* being required.

A large number of boats remained idle during the last season, and are scattered along the canal in secure places; many of those will necessarily require repairs, but when put in order and added to the stock now in use, it is believed there will be sufficient for the trade next season.

The tonnage of the boats has gradually increased since 1825, and can be still further augmented when the trade has attained that point to require it. The following table will give the increased amount up to this date:

Years.	Number of trips.	Tons carried.	Average tons per boat.
1825	260	6,500	25
1826	652	16,767	25 15—20
1827	1,183	31,560	26 10—20
1828	1,751	47,284	27
1829	2,909	79,973	37 10—20
1830	2,978	89,984	30 4—20
1831	2,338	81,854	35
1832	5,961	209,271	35 2—20
1833	6,054	250,588	41 7—20
1834	5,167	224,242	43 8—20

The boats on the canal give employment to two men and one boy each, exclusive of horses, making an aggregate (when all employed) of 1140 men and 370 boys, independent of the persons employed in loading and unloading, as also those stationed on the line of the canal.

It should be borne in mind that the persons above mentioned are employed in transporting the coal to tide water only, and that the same number of persons, as also the same amount of tonnage, are required to transport it from that point to the different places along the coast, where it is required for consumption.

Thus it appears that the trade on the Schuylkill alone gives employment to 24,733 tons for internal trade, and a like amount (excepting so much as is consumed along the line of canal and in Philadelphia) for coasting, together 49,466 tons, an amount exceeding any other branch of trade in the United States. If to this be added the amount sent from the Lehigh and Lackawana and the Bituminous coal raised in Virginia, it will not fall short of 80,000 tons, an amount that will bear a comparison with that of many of our commercial cities, and from the certain increase that will take place, we have good reason to expect that Congress will continue to sustain a trade that may with propriety be called a nursery for our seamen.

The canal was opened on the 13th of March and closed by the frost on the 15th of December, giving 276 days. In its present state it is estimated as able to transport 800,000 tons, and by deepening it one foot the boats may be enlarged and the transit increased without any material loss of water; but the Schuylkill is capable of still greater improvements, and it is believed that the day is not far distant when the present canal will give place to a slack water navigation sufficient to admit vessels to load at our wharves here, and carry our product direct from this place to the most distant part of our extended coast.

In our last report we stated our intention of addressing the Navigation Company, on the subject of a reduction of Tolls and other charges; that subject was promptly attended to and the correspondence is now laid before the association together with other correspondence and communications.

The Company during the last season reduced the number of ferries by erecting bridges, but declined acting on the subject of toll at that time,—we have every confidence that they will, ere long, comply with the just proposition made, and put the collieries of this section on a more favorable footing.

The dam erected by the Company on Tumbling Run (to serve as a reservoir for the canal) has been of material service and fully answers the purpose for which it was made, and although the past summer was dry and the springs lower than they had been known to be for many years previous—the canal was amply supplied from that source, and no interruption in the trade was experienced.

The dam is estimated, when full, to contain 24,000,000 cubic feet of water, equal to the contents of 3,000 locks. The Company are erecting another dam on the same stream, about half a mile higher up, which will contain about 50,000,000 cubic feet of water. When this is completed all fears of a scarcity, even in the driest season, will have vanished.

The Tumbling Run is a strong and regular stream, pursuing a course of about nine miles between the Second and Sharp Mountain,—and from its rapid fall is capable of affording a succession of Dams, at short distances throughout its whole course, if found requisite.

The free and unlimited use of the water of the Schuylkill by the Navigation Company, has created fears in the minds of many of the citizens of Philadelphia, that as the trade increases the supply of water for city purposes will be curtailed, and eventually rendered very precarious; already have disputes arisen between the City Authorities and the Navigation Compa-

ny on that subject,—but a plan has been proposed which, if carried into effect, will prevent the much dreaded scarcity, and add materially to the accommodation of the Coal Trade.

The plan contemplated is to continue the Canal from Fair Mount dam (where it now terminates) along the western side of the river to Mill Creek, a distance of 2½ miles, where if necessary, that stream may be introduced as a feeder, and as there will be no outlet necessary, all the water for that side may be retained in the Canal, or the water from Mill Creek may be thrown into Fair Mount Dam, and thereby increase the supply and aid the trade for those Boats that enter the River to discharge on the eastern bank.

To effect an object so beneficial to the Trade, and as your Board think, to the City also, a law is necessary to enable the projectors to carry it into effect, as the act authorising the construction of a canal confers no power on the Company to extend their works beyond their present termination, an application is now before the Legislature for such a law, and we have every confidence that when fairly viewed and considered, it will receive their sanction.

To accommodate the Trade, even in its present state, the wharf room is scarcely sufficient, and should it increase in the same ratio as it has done since the commencement, in a few years the present grounds will be wholly inadequate, independent of the heavy amount of Bituminous coal, iron, lumber, and other articles that will be sent from the Susquehanna by the Danville Rail Road and Union Canal.

Should the proposed plan be carried into effect, an ample space will be given, and that portion of our product designed for a foreign market, may be shipped at a much less expense than at present.

The elevation of the canal above tide water is such, that by enlarging it opposite the wharves, so as to admit of bringing boats near to the margin of the docks—chutes may be erected and the Coal discharged immediately into the vessels destined to convey it to a foreign market, by which means it will be shipped perfectly clean and in good order, without the labor and wastage incident to the repeated handling of the present plan.

The Board have long been desirous of procuring a correct map of the Coal Region, and have exerted themselves to secure the talents of a gentleman qualified for that undertaking: and they feel gratified that they are able to announce to you, that such a work is in progress and will soon be completed.

The work has been undertaken by Mr. Samuel B. Fisher, an experienced civil engineer, who has devoted much time to acquire an intimate knowledge of the Region, as also the owners of the several tracts, and the location of the different seams of Coal, as far as they have been ascertained.

The subject will occupy two maps: the first of which, on a scale of 1½ inches to the mile, will take in the Coal Fields of the Schuylkill, Little Schuylkill, Lehigh, Beaver Meadow, Mahanoy, Lykens Valley, and Swatara, covering a space of fifteen miles from North to South, and forty miles from East to West; and will lay down each tract with the original patentee, the number of acres, date of survey, and, as far as possible, the names of the present owners.

The Second, on a scale of 3 inches to the mile, will include the Schuylkill Coal Field only, and will give a view of the different tracts, streams, rail roads and branches, and all the beds now opened.

A book will accompany this last, giving an accurate account (taken from measurement) of all the openings, the thickness and pitch of the Beds, and quantity of the Coal.

The Board have examined the work during its progress, and recommend it to the attention and support of the Association: they believe it to be a correct delineation of the Region: the location of the beds of

Coal are accurately marked, and their character correctly given; they will continue their aid to Mr. Fisher, until it is completed, which they expect will be in all, this winter; and they have every hope that a work, combining so much useful and correct information, will meet with such support as will indemnify the compiler for his time and labor, so usefully directed.

That iron ore did abound in this section, was believed by many; but it was only during the past summer that the fact was fairly proved. In examining some of the tunnels (driven through the Coal measure, and at right angles with the seams of Coal) the ore was found, lying in regular veins, in the immediate neighborhood of the Coal, and in such quantities as to warrant the assertion, that it will be worth working. It is of the two kinds usually denominated Kidney and Bog ore, and from experiments made, is found capable of being worked with Anthracite Coal.

A trial was made at the furnace of Messrs. Buckley & Swift, which resulted in giving a sufficient quantity of iron, to prove that the plan would answer, when fairly tested.

A trial of refining Iron with Anthracite Coal was also made by the same gentlemen, in a reverberatory furnace, and was crowned with complete success.

A similar trial was made near Boston, some time since, and more than one hundred tons refined.

A patent has been taken out by our townsman, Mr. Thomas S. Ridgway, for making iron with Anthracite Coal. By his plan the sulphur is driven off from the Coal, and the ore carbonized by the same fire that smelts it, and the blasting and reverberatory furnace, are both embraced in one stack.

The model has been examined and approved by experienced iron masters, and they all agree that it combines all the requisites for smelting and refining iron.

The discovery of iron ore in the immediate vicinity of the Coal, and the plan of smelting it with Anthracite, will open a new prospect to all engaged, and we may with certainty look forward to the day, when this section will realise the expectations of those who have embarked their hopes in it.

In England, the smelting of one ton of iron ore is estimated to consume seven tons of Coal; and to convert the pigs into bar iron, three tons more are required, but as our Coal contains a much larger portion of carbon than the bituminous, and does not suffer the loss that is incident to coking, it is believed that to manufacture one ton of bar iron, from the ore, five tons of Coal will be sufficient. This branch alone will consume a vast quantity of our Coal, but when to this is added the manufacture of other articles which must be located where fuel is abundant, the increased consumption will be immense. Experience has taught that the manufactory of most articles can be conducted with more economy in a Coal district, than any other; and accordingly we find that all the great manufacturing towns in England are located in the immediate neighborhood of the Coal Fields.

The Coal consumed annually in England is estimated at 18,000,000 tons, exceeding one ton for every inhabitant. In this country it is but partially used, but the increase has been rapid, and a short period only is required before it will reach an amount that would at this day be too great to be credited. Already has it been used to some extent for steam purposes, and a further consumption must take place when the wood is cleared from the margin of the streams traversed by steam boats, which, from the rapid manner in which it has disappeared within the last ten years, makes it certain that another like period cannot elapse, before the expense of procuring fuel of that kind will exceed that at which Coal can be delivered for.

The Association was formed for the purpose of collecting and disseminating information on subjects connected with mining, and your Board have studiously avoided every print irrelevant to that object.

They have viewed the Coal Trade as one that is in an infant state, in this country, and requiring the united aid and support of *all*, to bring it to a successful issue. They view it as a trade capable of great improvement, and that as all are but new in it, all should throw their experience in the general stock, that the whole may derive the benefit.

Acting on this principle, they have pursued the one grand object, that of knowledge of, and improvement in the trade; and they feel gratified that the result has, thus far, answered their fullest expectations.

Respectfully submitted.

B. H. SPRINGER, President.

Pottsville, Jan. 5, 1835.

At a meeting of the Coal Mining Association, held at the Pennsylvania Hall, January 5, 1835, the following persons were unanimously elected the officers of the Association for the ensuing year:—

President—*Burd Patterson.*

Vice President—*John C. Offerman.*

Treasurer—*Samuel Lewis.*

Secretaries—*Andrew Russel and Charles Lawton.*

Board of Trade—*Samuel Brooke, Samuel Lewis, Thomas C. Williams, Samuel J. Potts, Martin Weaver, G. G. Palmer, and James Wilde.*

B. H. Springer, President of the Board of Trade, having resigned, it was

Resolved, That the thanks of this Association be tendered to Mr. Springer, for the ability, research and diligence that he has evinced in the discharge of his duties as the President of the Board of Trade, and while we regret his intended removal from among us, we sincerely wish success to his intended establishment in the Coal Trade in Philadelphia, and the Secretary is requested to communicate this resolution to Mr. Springer, and append it to the Report.

Extract from the Minutes.

C. LAWTON, Secretary.

At a meeting of the Board of Trade on the same evening, *G. G. Palmer*, was elected President, and *T. C. Williams*, Secretary.

From the Pittsburg Gazette.

NAVIGATION OF THE OHIO.—The editor of the Philadelphia Commercial Herald,\* some time since, requested us to give some account of the times at which the navigation of the Ohio was usually interrupted by ice and low water, for some years past. We had intended to do so, but other matters have prevented it. The opening of the rivers, yesterday, has called our attention to it again, and we now perform that duty in part. Messrs. Jacob Forsyth & Co. have politely furnished us with their steam boat reporter, since 1829, from which we collect the following information.

This book commences on the 4th of August, 1829, and gives arrivals and departures from and to Louisville, Cincinnati, throughout August, September, October, November and December, of that year, and through January, February, March, and the succeeding months of 1830, until the 14th of July.

The last arrival in January was the *Talisman* on the 18th; and the last departure the *Lark*, on the 19th.—Probably about the 20th or 21st, the river was closed by ice, though the book does not state this. Subsequently we find the following note:—*River opened Feb. 20, 1830.*" From the 14th of July, and through the months of August, September, and October, there were no arrivals or departures. On the 23d of November, 1830, navigation was resumed, and continued open

until the 14th of January, 1831, when it ceased. Subsequently we find this note:—*"River opened 19th of Feb. 1831."* Boats continued to arrive and depart until the 27th of September, 1831. The last arrival was the *Versailles*, on the 26th, and same boat departed next day.

From that time, there were no arrivals or departures until the 10th November, when navigation recommenced. Afterwards we find the following note:—*"River closed Dec. 4th 1831."* Then the following:—*"Ice broke Jan. 7th, 1832."* Subsequently the following:—*"Navigation again stopped with ice, January 26th, 1832."* It continued closed, however, but a short time; for, on the 1st of February, the *Talisman* departed for Louisville; and, on the 2d, the *Herald* (a new boat) for Mobile.

From this time, steam boats arrived and departed with ordinary regularity, until the 29th of June—from that day, there was neither an arrival or departure until the 11th of August, when navigation recommenced, and continued until Sept. 4.

From the 4th of September till the 9th of November, navigation was suspended by low water. From the 9th November, 1832, there was no interruption until the 21st day of July, 1833, except from the 14th till the 19th of January, that being the longest period in which there was no arrival or departure.

On the 21st of July, 1833, departed the steamboats *Mount Vernon* and *Albion*, being the last. There was then neither an arrival or departure until the 23d of September. From that day till the 1st of November, there were 13 arrivals and 19 departures. During the months of November, December, and up to the 3d of January, 1834, the navigation was brisk and active. Then we find the following notes.—*Monongahela River closed January 9th, 1834.—Allegheny closed same day.*" Immediately below is the following note:—*"Ice broke up, with high flood, Jan. 12."* From that date, until the 29th of July, navigation was regular and uninterrupted. During August and September, there was neither arrival nor departure.

Then comes the following note:—*"Navigation commenced for Steam Boats, Oct. 13,"* and continued until January, 1835, when we noticed the following minute:—*"River closed on the night of the 3d of January, 1835."* Then—*"River opened on the 23d."*

Navigation then became quite brisk—but, on the 6th of February, inst., it was again stopped by ice. On the 19th inst., the ice broke up again, which brings us to the present time.

Here, then, we have a faithful account of the interruptions of navigation during five years and a half, by which it appears that—

In 1830, the interruption by ice was about 30 days.	
1831	62
1832	12
1833	5
1834	3
	112 days.

In 1830, interruption by low water about 130 days.	
1831	44
1832	109
1833	64
1834	76
	423
	112

Total interruption by ice and low water 535 days.

It is gratifying to find that the interruption by ice, during these five years, was less than four months.—The obstruction by low water may be remedied.

\* Editor of Register? See Vol. XIV. page 318.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.--NO. 10.

PHILADELPHIA, MARCH 7, 1835.

No. 374.

## NEW YORK AND ERIE RAIL ROAD.

We are indebted to a New York subscriber for the proceedings of the Common Council of that city, a report of a Special Committee of the Board of Aldermen, and also the report of Benjamin Wright, Engineer, in relation to the *New York and Erie Rail Road*, intended to counterbalance the effects which would result from the efforts making in this state to attract to this city the western trade. These documents we conceive highly important to our citizens, and therefore present them for more general inspection, than they would otherwise probably receive.

### *Proceedings of the Common Council of the city of New York, in aid of the New York and Erie Rail Road.*

On the 1st of December, 1834, the Board of Assistant Aldermen, on motion of Assistant Alderman Johnson, adopted the following resolution:—

Whereas the immense augmentation which has been experienced in the extent, wealth and prosperity of the city of New York, since the completion of the Canals of this state, signally demonstrates the value and necessity of artificial channels of commercial communication, connecting the metropolis with the populous and fertile regions of the interior:—

And whereas several rival works leading into the state of Ohio, from ports on the Atlantic sea board south of this city, are now constructing and are rapidly advancing to completion under the direction of various companies incorporated, and powerfully patronized by the States of Pennsylvania, Maryland and Virginia, seeking to divert from the city of New York, the extensive and lucrative commerce which it has heretofore enjoyed with the rich and rapidly increasing States and Territories north of the Ohio river, and relying for success upon the greater severity of climate, experienced in the more northerly latitude of the State of New York, whereby the navigation of its Canals is suspended during a large portion of the year; and whereas it has become vitally important to the commerce of this metropolis, to obviate the difficulties and disadvantages to which it is thus subjected, which object can only be attained by constructing additional channels of trade and intercourse by means of Rail Roads leading directly from the city to the western waters, and available for commercial purposes at all seasons of the year.

And whereas the Legislature of this State at their last session, directed the route of a rail road to be surveyed under the direction of the Executive, through the southern counties of the State from the Hudson river to Lake Erie, for the purpose of ascertaining whether the public interest would be promoted by a subscription on the part of the state to a portion of the capital stock of the New York and Erie Rail Road Company (which was incorporated in the year 1832, for the purpose of constructing such road,) whereby the Commonwealth at large might participate in the burthens and benefits of that undertaking, or in what other mode the general objects sought to be accomplished by that act of incor-

poration, might properly be encouraged by the public authorities:—

And whereas it is now satisfactorily ascertained by means of that survey, that in case the state shall co-operate and participate in the enterprise, the whole of the road in question can be completed within four years from the first day of May 1835, and a communication thereby provided, by which passengers and merchandise may be regularly transported at all seasons of the year, in less than forty hours from the city of New York to the southern shore of Lake Erie, communicating also by means of the Allegheny river directly with the valley of the Ohio:—

And whereas the inhabitants of this city are deeply interested in the prosecution and speedy accomplishment of this most important undertaking, tending as it plainly must, to attract and secure for ever to this emporium the vast and expanding trade of the most fertile, valuable and populous portion of the continent, thereby augmenting its commerce, prosperity and wealth to an incalculable extent:—

Therefore Resolved, (if the Board of Aldermen concur herewith,) that it be referred to a Joint Committee of three members of each Board to report resolutions signifying the sense, which the Common Council entertain of the necessity, importance and value of the proposed work, and to inquire and report what measures, if any, the city may properly adopt to promote and secure its speedy execution.

On the 3d day of December, 1834, the Board of Aldermen, on motion of Alderman *Stitwell*, concurred in the resolution, and a committee was appointed of three members from each board.

On the 4th day of February, 1835, the joint committee presented the subjoined report, which was adopted on the 9th of that month by the Board of Assistant Aldermen, and on the        by the Board of Aldermen.

The Special Committee from the Board of Aldermen and Assistant Aldermen of the City of New York, to whom was referred the resolution of Assistant Alderman Johnson, touching the necessity, importance and value of the proposed rail road through the southern counties of this state, from the Hudson River to Lake Erie, respectfully beg leave to

## REPORT:

That for the purpose of being more fully informed of the details of the subject thus referred to their consideration, they have summoned before them several of the Directors of the New York and Erie Rail Road Company, incorporated in the year 1832, for the purpose of constructing the proposed road, and have also been attended at their request by Benjamin Wright, Esquire, and his assistant engineers, under whose care the route of the road has been recently surveyed. From these individuals the Committee received very full and satisfactory explanations, and nevertheless the Committee being conscious of the momentous importance of the subject under examination, felt it also to be their duty to satisfy themselves, as far as was practicable, from auxiliary sources of information, of the accuracy of the details which were elicited on this interesting

examination. It fortunately happened that one of the committee, by having been engaged for a considerable time in a work of public improvement intersected by the route of the proposed road, had become considerably familiar with the topography and also with the trade and resources of that portion of the country, and was thereby enabled greatly to facilitate the examinations of the Committee.

The Committee moreover deemed it proper that they should make no statements affecting a subject so deeply interesting to the community at large, without a full and sufficient scrutiny, and they have therefore pursued their examination with a minuteness of inquiry which has brought them into acquaintance with many interesting details, which they may deem it expedient hereafter to make the subject of a supplemental report.

In the mean time they beg leave to present to the Common Council the present summary statement of the facts which have been ascertained by their examination.

In the first place, then, they report, that after full inspection of the maps and plans returned by Judge Wright, and copious explanations from himself and his assistants, they are entirely satisfied that it is practicable to construct the proposed road—and that it will afford the means of transporting passengers, merchandise and the public mails at all seasons of the year, in less than 48 hours from the city of New York to Lake Erie.

The road after leaving Rockland and Orange counties, will follow successively the large valleys of the Delaware, and Susquehanna and the Allegheny, and thereby obtain the easy grades of declivity naturally pursued by these streams. The surface of much of the country adjacent to the line is undulating, but the apparent difficulties, which are thereby presented, are avoided by following the water courses.

In the language of Judge Wright, the road "goes *around* instead of *over* the hills." The whole line of the route is 483 miles, capable however, of being shortened to 460 miles; but it is not comparatively more circuitous than the canals of Pennsylvania. The ascents on much the greatest portion of the route, are generally from 5 to 30 feet per mile, and do not exceed 60 feet per mile, except in five or six instances, where the line crosses the natural boundaries of the large valleys. No stationary engine or inclined plane will be necessary on any part of the road, except in one instance, about four miles from Lake Erie, and even that may be dispensed with by altering the grade for eight miles, at a moderate expense. Locomotive engines, drawing passenger cars, may be propelled over every portion of the road (except the inclined plane) with economy and advantage; and at the points where the rate of declivity exceeds sixty feet to the mile, the passage of burthen cars heavily loaded may be easily and cheaply expedited, either by auxiliary locomotive engines, or an addition of animal power. It is quite certain that passengers may be carried over the road with great celerity and profit, and from the testimony taken before the Committee, and the personal information of one or more of its members, they are entirely satisfied that the road will also serve to transport to tide water the lumber, provisions, live stock, fuel, and agricultural products of the region of country adjacent to the route and its contemplated branches, and carry back merchandise in return, more cheaply and advantageously than can be effected by any other channel of communication.

The road will be intersected by several lateral branches and canals, which will greatly increase its revenue and its importance. In the western part of Orange county, it intersects the Delaware and Hudson Canal; in Broome county, the Chenango canal; in Tioga county, the Chemung canal; in Delaware county,

Delhi: in Otsego county, by a very important and valuable branch leading up the valley of the Unadilla to Utica, for which a charter is obtained and the stock already subscribed; a branch will lead through the valley of the Onondaga River, in the county of Cortland, to the Salt Works at Syracuse: at Owego, the rail road now finished to Ithaca, will immediately connect the main line with the fertile country adjacent to the Cayuga and Seneca Lakes: by the line of Steamboat navigation now in preparation on the Susquehanna at Owego, it will be united to the valley of Wyoming and the coal regions of Pennsylvania: the contemplated rail road from Rochester to Danville, if extended a few miles, will intersect the main line in Steuben county: in Allegheny county it will intersect the contemplated route of the Rochester and Olean canal: and it will become connected in Cataaugus county with the Allegheny River, and thereby open a direct communication between the city of New York and the large and populous communities and cities in the valley of the Ohio. The map of the proposed route annexed to this report fully exhibits these several localities, and is well worthy the attention of the Common Council.

2. The Committee are of opinion that this work will afford immense public benefits to the inhabitants of this metropolis.

The rapid, constant and regular communication it will insure at all seasons of the year with the extensive and fertile grazing districts in the counties of Orange and Delaware and the valley of the Susquehanna, will cheapen the price of subsistence, by affording abundant and uninterrupted supplies of provisions for the public markets: the excellent and valuable timber furnished by the counties of Steuben, Allegheny and Cataaugus, by reducing the cost of building, will accelerate the growth of the city, and at the same time facilitate the operations of ship building: the rapid and regular passage it will secure to the public mails, will insure the speedy transmission of commercial intelligence: it will provide for the public defence, by affording the means of military communication with unparalleled speed between the Atlantic and Western frontiers; while the comfort and health of our citizens will be promoted by obtaining cheap and frequent access to the healthful regions of the interior.

3. The speedy completion of the work has now become an object of transcendent importance to the merchants, traders and land owners of this city, in order to preserve and extend its great and lucrative trade with the West.

The important and alarming truth can no longer escape the attention of our municipal authorities, that the intercourse between this city and the great West, to which it owes so large a share of its present prosperity and power, is totally suspended during five months of the year. Availing themselves of that circumstance, the public spirited citizens of Pennsylvania have constructed and have now recently completed a line of canals and rail road from Philadelphia to Pittsburg, which are available for the purposes of trade and intercourse during at least two months of the year in which the navigation of the New York canals is suspended, by the greater severity of their more northern latitude. The Erie Canal is not usually navigable until the 20th of April, and rarely remains open after the 20th of November. The canals of Pennsylvania, favored by a more southern climate, are generally navigable about the 10th of March, and remain so until the 25th of December. The merchants of Philadelphia are thereby enabled to monopolize the western trade during portions of the spring and autumn, peculiarly valuable for commercial purposes. Even after the navigation is opened on the Erie Canal, the intercourse between New York and the west is obstructed for a considerable time, by the ice accumulated during the months of March and April in the harbor of Buffalo, while the navigation of the Ohio river being open at Pittsburg during that

important season of the year, the produce of the west finds its way to Philadelphia, and its proceeds are invested in merchandise, and transported into the remotest portions of the interior, before vessels are able to navigate the eastern end of Lake Erie. The intelligent and enterprising merchants of Philadelphia, supported by the united efforts of their Board of Trade, are striving to follow up this advantage, by promoting with great zeal, the construction of lateral canals and rail roads by the state of Ohio, and by private companies, extending northwesterly from the Pennsylvania line to the Ohio canal, for the purpose of effecting a communication between Pittsburg and the harbor of Cleveland, on Lake Erie; and that too for the avowed object of diverting from the city of New York the lucrative commerce it has heretofore enjoyed with the northern parts of Ohio, Indiana, Illinois, and Michigan.

There is no mode of successful competition with these efforts of our public spirited rivals, except by opening a winter communication between this city and the harbors on the wider part of Lake Erie.

The proposed road will accomplish that object by affording the means of transmitting merchandise at all seasons of the year within forty eight hours from the warehouses of New York to the harbors of Dunkirk, Portland or Erie, while its connection, with the cheap descending navigation of the Allegheny river, (which is generally available in the latter part of February, and early in March, and is capable with small expense, of being rendered navigable for steamboats at all seasons of the year,) will enable the merchants of our city to furnish the cities of Pittsburg, Cincinnati, and the other trading towns in the valley of the Ohio with their spring supplies before the opening of navigation on the Pennsylvania Canals. The speedy completion of this road will moreover encourage and hasten its speedy continuation by great western and southern branches leading from Lake Erie to various points on the western and south-western waters, whereby passengers, merchandise, and the mail, may be transmitted in six days from New York to St. Louis, and thus this great central channel of intercourse, lying wholly within the limits of our own state, and subject to its sole jurisdiction, will become the main trunk of a connected system, or series of internal communication extending from the port of New York, throughout the populous region in the vast and fertile valley of the Mississippi.

The statistical particulars of these great lines of western communication, and the important influence they will exert in directing their trade into Lake Erie, and thence to the City of New York, will be found in an interesting letter furnished to the committee, by one of the directors of the company, which is annexed to this report, and is recommended to the attention of the Common Council as a document of much importance.

4. The preservation of the trade of these great inland districts, by connecting them closely with this city by means of cheap and rapid channels of communication, has become an object of the deepest solicitude to the landholders of New York, and every person interested in its permanent prosperity.

The past growth, and in truth the very existence of this metropolis, are wholly owing to the facilities of communication it possesses with the agricultural population of the interior. The Erie Canal opened a channel of intercourse during seven months of the year, between the port of New York and inland districts containing little more than a million of inhabitants, and yet within ten years from its completion, the assessed value of the landed property of the city, was augmented from 52 to 114 millions. The completion of the proposed road, will bring into constant connection with the city of New York an increased amount of territory, already containing three and destined within six years to number more than six millions of inhabitants; while the impulse imparted to the agricultural prosperity of those inland

communities by the facilities afforded to them for cheap and expeditious communication with their trading emporium, will augment to a corresponding extent their capabilities of pursuing a profitable commerce with the sea board.

It has been frequently and by no means extravagantly stated, that the construction of the Erie Canal, by diminishing the time and labor expended in transportation, has saved annually to the citizens of this state not less than \$5,000,000, and added at least \$150,000,000, to their aggregate wealth. This immense and rapid augmentation of value will afford a criterion, although imperfect, by which to estimate some portion of the pecuniary benefits to be derived by the public from the opening of a communication not less cheap, more regular, and far more expeditious than the canal, between this metropolis and a district of fertile territory, embracing an area more than eight times as large as the state of New York, west of Utica. To calculate with any accuracy the value of the vast and illimitable trade which within twenty years will be concentrated upon the waters of Lake Erie, destined before the present generation shall pass away, to number more than a thousand vessels, and to bear on its surface the wealth of at least twenty millions of the American people, or to compute the prodigious rise in value, which the landed property on the Island of New York will experience, when the vast and expanding commerce of these great inland communities shall be concentrated within its limits will not be attempted: but it will be confidently claimed that the increase in the value of the real estate in this city within the first ten years after completing the proposed road, will repay more than tenfold the whole cost of its construction, and that the augmentation in the population and wealth of the immense and fertile regions which will be brought by its completion within four days travel of the sea board, will defy all attempts at sober calculation.

5. In what mode, then, can this great enterprise, yielding public advantage thus enormous, be most effectually and speedily accomplished?

In the year 1832, the standing committee on the internal improvements in the Legislature of this state, after full examination of this and other projects of inland communication, reported that it would not be politic for the state, as such, to construct rail roads; and for the obvious reason, that the owners of the road must manage the transportation, and the state could not become common carriers. But the committee recommended the incorporation of companies, whenever individuals should see fit to risk their property in constructing rail roads, reserving, however, the right, which is reserved in all other acts of incorporation, to repeal or modify the charters. The committee also recommended that the state should subscribe to portions of stock in this and all the other great leading routes, whereby the public at large might participate, to a certain extent, in their pecuniary profits, (if any,) and at the same time secure the economical management resulting from the vigilant attention of individual proprietors.

The annual message of the Governor to the Legislature at the opening of the session in that year, after stating that the construction of rail roads in various parts of the state would "become eminently promotive of the public good," but that "many generations must pass away before the numerous improvements worthy of the enterprise of the state, could be undertaken by the public means alone," recommended that companies of individual proprietors be incorporated with power to construct them, reserving, however, to the Legislature, the right secured in all the recent acts of incorporation, to take possession of the roads or public property, on equitable terms.

The Legislature accordingly, in the year 1832, chartered a company for the purpose of making the proposed road, (subject to the reservations recommended by the Governor,) with leave to issue capital stock to the

amount of \$10,000,000, requiring them to expend \$200,000 before April, 1837; to finish one quarter of the work before April, 1842; one half before April, 1847; and the whole before April, 1852; and authorizing them to receive donations of lands in aid in the construction of the work. By an amendment, obtained in 1833, the company were empowered to organize themselves, on receiving subscriptions of stock for one million of dollars. That amount was duly subscribed, and is now held principally by merchants, land holders, and other inhabitants of this city, deeply interested in its permanent prosperity, and anxious to complete the proposed work with all practicable despatch.

In order to ascertain how far the public interest would be promoted by a subscription to the stock, on the part of the State, the Legislature in May 1824, authorized the route to be surveyed at the public expense. In the mean time, the Directors of the Company have been actively employed in making the inquiries and investigations necessary to the prosecution of their object, adopting measures calculated to secure the confidence of capitalists, and obtaining donations towards their work from large proprietors on the route; and they have met with such success, and such encouraging assurances that they are confident of being enabled to commence the road during the ensuing season, and they believe that in case the Legislature should authorize a subscription by the State, for a portion of the stock, or a loan of its credit to the company, they can complete a single track of their road over the whole route within five years.

The expense of the whole work, as estimated by Judge Wright, including the graduation for a double track throughout on solid earth embankments, and laying down a single track ready for use from the Hudson River to Lake Erie, will not exceed \$4,762,000. The graduation of more than one half of the line does not exceed \$4,000 per mile. The whole route is embraced in six large divisions, to wit:

The *First or Hudson River Division* extending 73½ miles from a point on the Hudson River, near the southern extremity of Rockland county, (distant 24 miles north of the City Hall of New York,) to a point in the Deer-park Gap of the Shawangunk mountain near the west line of Orange county, dividing the waters of the Hudson from those of the Delaware.

The *Second, or Delaware Division*, extending 115 miles from the point last mentioned, through the valley of the Delaware and its tributaries, to a point near Bettsburgh in Chenango county, dividing the waters of the Delaware from those of the Susquehanna.

The *Third, or Susquehanna Division*, extending from the point last mentioned, 163½ miles along the valley of the Susquehanna and its branches, to a point near the west line of Steuben county, dividing the waters of the Susquehanna from those of the Genesee.

The *Fourth, or Genesee Division*, extending from the point last mentioned, 37 miles across the valley of the Genesee, to a point near the east line of Cattaraugus county, dividing the waters of the Genesee from those of the Allegheny.

The *Fifth, or Allegheny Division*, extending from the point last mentioned, 83 miles along the valley of the Allegheny and its tributaries, (situated at the northern extremity of the great valley of the Ohio,) to the head of the inclined plane, near Lake Erie.

The *Sixth, or Lake Erie Division*, comprehending the short and rapid descent to the shore of the lake, including the inclined plane, and two branches of the road, one to the harbor of Dunkirk, 8½ miles, and one to Portland, 9 miles.

6. The execution of this most valuable and necessary work, being thus shown to be free from physical difficulties, and capable of being completed at a moderate expense, the question then arises, of much importance to the public, and one which the Committee deemed it their duty fully to examine, whether the company now

incorporated, possess sufficient means and resources to complete the road with the energy and despatch which the public interest requires. The Committee, in prosecuting this inquiry, have personally examined the officers, directors, and books of the Company, and from that personal inspection, they have ascertained that \$1,000,000, has been regularly subscribed to the stock and it now is held by individuals greatly interested in the permanent prosperity of the city, and fully determined to spare no effort to insure the speedy completion of the road. The concerns of the Company are managed by 17 directors, fourteen of whom, to wit:—James G. King, the President, Eleazer Lord, the Vice President, Peter G. Stuyvesant, John G. Coster, John Rathbone, junior, Gold Hoyt, Samuel B. Ruggles, J. Green Pearson, Elihu Townsend, Peter Harmony, Stephen Whitney, James Boorman, John Duer, and Michael Burnham, reside in this city, and are well known to their fellow citizens, and the remaining three, to wit: Jeremiah H. Pearson, George D. Wickham, and Joshua Whitney, reside in the counties along the route, and equally command the confidence of the inhabitants of that part of the State.

The committee have also satisfied themselves, by personal inspection, that the first instalment required on the million of dollars, heretofore subscribed to the stock, has been regularly paid in cash, and that it is now duly deposited upon interest, with the New York Life Insurance and Trust Company, subject to the joint order of the President and Vice President of the New York and Erie Rail Road Company.

It was not necessary, nor would it have been at all prudent or expedient, for the directors to have proceeded in the actual construction of the road, until the route should have been surveyed, and it was also desirable, that the survey should be finished, which had been ordered by the state, in order more perfectly to secure and confirm the confidence of the large capitalists, whose co-operation was absolutely necessary in the prosecution of so great an enterprise.

The very favorable results ascertained by Judge Wright, and by his report to the Secretary of State, presented about the 1st of this month, a copy of which is hereunto subjoined, have entirely confirmed the belief previously entertained, that the work is perfectly feasible, and that it will be profitable not only to the community, but to the stockholders, who may embark their funds in its construction. The committee are assured, that the directors intend forthwith to open books for private subscriptions, for the additional amount of two millions, and that they entertain the most perfect confidence, that by means of the subscriptions already obtained, and the assurances of valuable donations of lands along the route, tendered to them by the inhabitants (all but unanimously) along the whole route, and of their zealous and hearty co-operation, recently and repeatedly, and at all times expressed in their town and county conventions, the company will be enabled to commence the actual execution of the work during the ensuing season, and nearly two years before the time allowed for that purpose, in the charter; and that in case the state shall loan its credit, or subscribe for the stock to an amount not exceeding one third of the cost of the road, the company can complete the whole from the Hudson River to Lake Erie, within five years.—And the committee are further satisfied, that even if the state shall decline in any mode to assist the company, and they shall be left to their own unaided resources, they can within two years complete the second or Delaware division of the road, and thereby divert to this city, through the Delaware and Hudson Canal, a large portion of the exports now passing out of this state, down the Susquehanna River;—and it is moreover confidently believed, that the productiveness of that division, by demonstrating the value of the whole work, will sustain the credit of the stock, and enable the directors to extend the road without delay to Lake Erie.

The inquiry then arises as to the mode in which it



will be proper and expedient for the Common Council to aid in the accomplishment of a work, affecting so deeply the interests of the City and its inhabitants.

Whether the City in its corporate capacity possesses the legal right to make donations of land or money, in aid of this work, or to subscribe its funds to any portion of the stock of the Company, it is not necessary to inquire. It may be well however, to state, that the municipal authorities of the City of Baltimore, deemed it their duty to assist in the construction of a rail road from that city to the Ohio river, by a subscription of \$500,000 to the stock of the company engaged in its construction. The city of Richmond, with a population of less than 20,000 inhabitants, has recently subscribed \$200,000 to the stock of the company, incorporated for the purpose of opening a communication by canals and rail roads, between the Atlantic coast of Virginia and the river Ohio. The Union Canal company of Pennsylvania, has recently been aided by a loan of the credit of that state, for \$200,000, authorized by its Legislature: and the Pottsville and Danville Rail Road company, incorporated for the purpose of directing to the city of Philadelphia, the trade of the Susquehanna valley, and claiming through that channel, to divert from the city of New York, a large part of the southern counties of this state, has recently obtained from the state of Pennsylvania, a loan of its credit for \$300,000.

In the judgment of the committee, the aid to which the New York and Erie Rail Road Company, are justly entitled from the public, ought to be rendered directly by the state. They therefore report, that it will not be expedient for the Common Council at present to aid in the enterprise, except by uniting strongly in the petitions to the Legislature, praying the state to co-operate in the efforts of the company, and thereby signifying the unanimous sense which the municipal authorities of this city entertain of the public importance of the work.

The city possessing one-third of the taxable property of the state, is consequently interested to that extent, in the pecuniary consequences of any subscription by the state at large; and will accordingly gain or lose to that extent, by the profit or loss, the result from the investments in that mode of the public funds. The committee, however, do not believe, that the state can sustain any pecuniary loss by such subscription, inasmuch, as they deem it almost positively certain, that the road when completed, will produce an annual revenue fully equal to the interest on its cost.

The road will cost much less than the Erie Canal, but in many respects, will be far more useful to the public, and consequently will be capable of yielding a much greater revenue.

It will be open and available, and earning income during the long interval of five months, in which the Erie canal is closed;—it will afford facilities for the expeditious transportation of passengers and the public mails, not possessed by the canals;—it will be connected by its lateral branches, and the numerous rivers and canals, which it will intersect, with the most fertile and populous parts of the State, and with an extensive district in Pennsylvania and in New York, abounding in natural resources, and capable of rapid advancement in population, prosperity and wealth; and, above all, the fact that it will open the most direct and central avenue of trade and intercourse between the Atlantic seaboard, and the immense and expanding communities adjacent to the great Lakes and waters, and internal communications of the west. The consideration of these combined and manifold advantages will therefore most assuredly justify the expectation that the business of the road will yield an income fully equivalent to the interest on its cost, and the risk assumed in its construction, and that the public spirited individuals who may subscribe to the stock (including the State to the full extent to which it may participate) will

advance their pecuniary interest, while at the same time they will promote to an incalculable extent the public good.

The Committee therefore beg leave to submit for adoption, the following resolutions:—

Resolved, That the speedy construction of the New York and Erie Rail Road, has become an object deeply interesting and important to the merchants, mechanics, traders, landholders, and all other inhabitants of this city—and that the efforts of the company who have been incorporated with power to construct it, merit and ought to receive the zealous support and co-operation of the public authorities.

Resolved, That from the minute and personal examination of the concerns of that Company made by the Committee of the Boards of Aldermen and Assistant Aldermen, and the facts herein above set forth, of the situation and prospects of the Company, there can be no reasonable doubt of their inclination and ability to complete the Road with all practicable despatch, and to finish the whole within five years, in case they shall be aided to a moderate extent, by the patronage and co-operation of the state.

Resolved, That it is proper and expedient for the Common Council, as representatives of city and the county of New York, containing one-third of the aggregate amount of taxable property within this state, to petition the Legislature to invest a portion of the public funds in the stock of the Company, or else to facilitate its objects by a loan of the credit of the state, and therefore—

Resolved, That his Honor the Mayor be requested to transmit to the Legislature, the petition of the City of New York under its corporate seal, setting forth the necessity and advantages of this great work, and soliciting the Legislature to aid in its speedy execution.

Resolved, That the public authorities of our sister City of Brooklyn, constituting a large and important portion of our commercial emporium, be, and they hereby are respectfully invited to co-operate with the Common Council of this City, in such measures as may become necessary to facilitate the completion of the proposed road.

Resolved, That it be recommended to the citizens at large, assembled either in general meetings, or in their respective wards, to adopt energetic measures, to express to the Legislature their sense of the transcendent importance of this great work, in preserving and extending their internal commerce with the west, and thereby augmenting to an incalculable extent, the population and prosperity of this metropolis.

Resolved, That in view of the importance of the proposed route, in affording unrivalled facilities for the rapid transmission of commercial intelligence, it will be proper to petition the Congress, or the Post Master General, of the United States, to adopt such measures as may be necessary to secure the permanent use of the road, for the carriage of the public mails, and that his Honor the Mayor, be requested to transmit to Washington, such memorial and petition in that respect as may be appropriate.

Resolved, That the members of Assembly, and of Congress from this city at Albany and at Washington, be, and they hereby are respectfully requested to use their best efforts in such mode as to them shall seem proper, to promote the success of the petitions thus to be presented by this city—and that they be furnished by the Mayor with copies of this report and the accompanying resolutions.

WM. SAM'L. JOHNSON,  
SILAS M. STILWELL,  
ISAAC L. VARIAN,  
JOHN BOLTON,  
J. J. BOYD,  
JOHN DE LAMATER.

New York, Feb. 4th, 1835.

(Wright's Report hereafter.)

## INTERNAL IMPROVEMENTS.

Report of the committee on Inland Navigation, upon the Internal Improvements of the State. **MR. MILLER**, of the City, Chairman.

*Read in the House of Representatives, Feb. 17, 1835.*

The committee on inland navigation report. In compliance with custom, if not with a duty they owe to that body which has confided to them a trust so important as the one which has occupied their attention, a report seems to be called for, especially as the public works of the Commonwealth are so nearly completed that it can scarcely be a perversion of language to say that they are so.

Admitting the correctness of the assertion. After the lapse of a long period of exertion and perseverance rarely equalled—after struggling with innumerable delays, difficulties and disappointments—after overcoming the numerous obstacles which nature had interposed in the way of the completion of the vast system of internal improvement which she has projected; Pennsylvania is now about to put the sickle into, and reap the harvest, which blossoms before her.

Your committee are fully aware that the same prospect of a rich harvest has long since been held up to the view of our citizens, which has been partially blasted by the result, and the result of the experience of the past year is an exemplification of the disappointment to which the best laid plans of man are liable, and the most reasonable expectations disappointed. But when we turn to the past and give due attention to the events which distinguished that year, and reflect on the derangement of the plans of individuals, and the consequently limited sphere to which individual enterprise was confined; the influence of these effects on the aggregate exchange of commodities, and the want of suitable arrangements for their transportation, incident to every new and extensive undertaking, there is no reason on the one hand, to blame those who sketched the picture which failed to be duly filled up, nor on the other, ought it to inspire doubts of the correctness of the estimates of the future productiveness of these works: And while your committee will not call in question the wisdom and foresight of others, neither are they willing to participate in the praise or the blame to which they are justly entitled, and take the liberty to refer to the conclusion of their report of last session, where it will be seen that a later view of the subject induced them to believe that the causes of partial failure were already apparent and in a course of development, and the result might then have been readily anticipated. Whether or not the present year will produce a similar disappointment cannot now be determined. Should wise, prompt and energetic measures be adopted to avail ourselves of the means within our power, your committee are convinced that the revenue anticipated from our canals and rail roads will equal the amount anticipated by the officers of the Commonwealth; notwithstanding that a variety of causes lessened the amount last year, it was still double the amount of that of the former, and little if any doubt is entertained by your committee, that the tolls of the current year will at least double that of the last.

Some of the causes which operated last year do not now operate. No pecuniary difficulties of an important character affecting the internal trade of the country are known to exist, and none are apprehended, so far as your committee are informed. Preparations are now making to carry on an immense trade on the public improvements, and notwithstanding that some loss is apprehended from the want of the early action of the Legislature, in establishing a system for the government of a portion of the line of her improvements, yet that will not, they trust, be great, if their action, though late, be wise.

Certain that the committee are not attempting to mislead others, and convinced that they are not deceiving themselves on this point, they will not attempt to

conceal from the House, that they commenced the performance of their duties, fully aware that the present financial circumstances of the Commonwealth, made it incumbent on them to act with care and circumspection, and to present to the house an exposition of the motives which regulated their conduct.

They did not conceal from themselves, that the extensive works constructed by the commonwealth, have created a large debt. That the receipt of the revenue expected from these works had been delayed far beyond the period originally anticipated. That this circumstance made it possible that it might become necessary to resort for a time, to loans, to pay the interest on former loans, until the revenue which might be derived from tolls, should, together with that derived from other sources, be sufficient to pay the ordinary expenses of government, and the interest on the state debt.

On the other hand, they saw only the first part of the original plan completed, and parts of the second in progress, or completed only to an extent serving to show how unproductive they were likely to be as they exist, and how productive when extended to their ultimate limits. Convinced by past experience, that delay in execution had too often proved to be a waste of our resources, the alternative of a vigorous effort to carry out to its fullest extent the original plan in the shortest space of time presented itself. This would have involved the expenditure of five—perhaps six millions of dollars, and, however they might be sustained in this course by the opinions of some of the wisest and ablest statesmen, your committee thought it incumbent on them to inquire, whether a resort to the expedients referred to, or to a system of direct taxation, unpopular under all circumstances—inexpedient under many, and in the present case, averse to the habits and opinions of most of our constituents, ought to be recommended.

Your committee do not doubt for a moment, the ability of the commonwealth to carry fully into effect the whole of the improvements originally contemplated. Her resources are equal to the task, and the ultimate advantage is certain. Even admitting for a moment that the investment of the millions she has expended, and will expend, to be an investment less profitable than is anticipated, the advantages resulting to the community from the diminished cost of transportation alone, are greater in value than the whole interest on the capital invested. No one who has reflected on the enormous expenditure which successive generations have expended in the improvement of a country fresh from the hands of nature, to the time when the most common roads have succeeded to the Indian trail; when the huge four wheeled wagon has succeeded the pack-horse; the bridge—the ford—the solid turnpike—the sometimes impassable road, and has thought on the expediency of dispensing with them, (were it possible to do so) and their attendant improvements, could doubt for a single moment the soundness of the policy which directed their construction. The construction of canals and rail roads, is but the compression of the works, and the advantages and labors of ages, within the limits of a few years.

Facts are not wanting to illustrate and sustain these positions, and it is only necessary to state them here.—Men are prone to overlook or undervalue the advantages they enjoy, because they are not commensurate with the, perhaps, extravagant hopes they have entertained. Their advantages are either direct or tangible, or they are indirect and intangible—not readily measured by a pecuniary standard, but nevertheless, certain and unquestionable.—They benefit one portion of the community in one, and the other in a different manner.

The inhabitants of our large cities and towns, are directly benefitted by the introduction of an abundant supply of mineral coal at a moderate price, and this is participated by the inhabitants of the adjacent and even more remote districts, according to their proximity to

the canals or rail roads of the Commonwealth, or those of companies. Had no canals been made, coal could not have superseded the use of wood as fuel, so extensively as it has, for domestic and for manufacturing purposes. Were it not for this, every cord of wood would unquestionably have cost two dollars more than is now the price. The number of inhabitants in the city and county of Philadelphia alone was, according to the last census, 188,981, and according to the average annual rate of increase for the ten previous years,  $3\frac{1}{2}$  per cent, the number at present exceeds 200,000; and allowing the consumption of wood for domestic use to be only equal to one cord per annum for each inhabitant, the saving, at this under rate, is \$400,000. Admit the consumption of manufacturers and steamboats to be only 50,000 cords, at \$2 per cord, \$100,000—and the result is, \$500,000 saved directly to this comparatively small community, by these canals. It is true they were made by companies, but they serve equally well the purpose of illustration.

These advantages derived from the substitution of coal for wood, as fuel, are rapidly becoming diffused over a larger extent of country. But to limits however small the domestic use of this article be confined, not so is the advantage arising from it. That circle is far more extended. It affects the price of every article, whether of domestic or foreign origin, sold within the district—which are sold cheaper in proportion as the price of the means of living are reduced; thus circulating to the extremities, the wealth accumulated at the heart.

To the owners of coal lands; the advantages are too palpable to need illustration. The manufacture is benefited by the cheapness of transportation, and the consequent enlargement of the sphere in which he can carry on his operations. To the agriculturist, the benefits are equally manifest to the reflecting mind; and although it is sometimes supposed that the price of his products are reduced, by the competition of the same products brought from a distance into the market by these means of communication, this seeming disadvantage is more than counterbalanced (admitting it to exist) by his greater proximity to the market at which he sells and buys, and by the better adaptation of the lands in the vicinity of a great market, to other products and merchandize, for the cultivation of which his own lands have become, from various causes, unsuitable, and which he now obtains at an expense less than that at which he could afford to cultivate them. The benefits which the community derives from the facilities to trade by means of the State improvements, are necessary and inevitable consequences, which must be participated by every one who does not, by an act of insanity, refuse to avail himself of. In some cases, they are broad and palpable as the air that surrounds—direct and visible as the objects around him: In others, they are equally real, but not so obvious, as the air, which he well knows presses equally on all parts of his frame, and only becomes sensible by the abstraction of its effects.

Owing to a misapprehension of the manner of keeping the account of tonnage, the directions of the canal commissioners having for their object the ascertainment of the weight of commodities transported on the canals and rail roads of the Commonwealth, it is not practicable to determine it exactly. But it is believed to be at least one hundred and seventy-five thousand tons, of products of the forest, the field, the mines, the ocean and the workshop, of foreign and domestic produce and manufacture of every description, transported to and from every direction to which they lead and extend. If we assume their terminating points to be, in a direct line, 300 miles apart—that is, the distance between Philadelphia and Pittsburg—then, as a portion of this tonnage was carried in every direction, and to various distances, it is deemed fair to estimate the whole to have been carried 100 miles, or one-third of the dis-

tance between Philadelphia and Pittsburg. Next, supposing the average cost of transportation to Pittsburg to have been \$1 25 per hundred weight, the cost of transporting the whole quantity one-third of the distance is

\$1,458,333

Now assuming as a basis for comparison, the lowest average cost of transportation to Pittsburg, before any of these facilities existed, to have been \$3 25 per hundred weight, the same products would have cost for transporting by wagons, (the only method then in use,) the same average distance,—175,000 tons, of 2,000 pounds each,—at \$3 25 per hundred,

3,791,666

Difference—amount saved,

\$2,333,333

It is true that a portion of these commodities, perhaps a large portion, actually transported under existing circumstances, could not have borne the cost of transportation under the former system, and of course could not have been brought into use. Heavy products must have remained in the earth, or still flourished in the forest—lived in the ocean, or remained a rude mass unshapen by the artist. But the advantage is not the less real on that account: it is only more manifest. But were the foregoing estimate of advantages, founded as it is, on facts, admitted to be too high, one-half of the amount might be abandoned, and the conclusions of your committee would nevertheless be fully sustained, to wit:—that our citizens are repaid every dollar of the interest paid by the Commonwealth.

Such being the views of the committee respecting the certain advantages which our citizens must derive from our improvements, though far from being fully carried out, it would seem that an increase of that debt for a short time is a circumstance not calculated to alarm any but the timid. It is true, that considered abstractly, a large public debt is a burden on the community, and when it has been created by an expenditure for objects destitute of utility, still more so. In the prosecution of unnecessary wars, it may well be deemed onerous and oppressive, and the policy as well as the justice of burthening posterity with it might well be questioned, if indeed it admitted of question. But if, as in the present case, the existing shall leave to a future generation, the total amount of a debt contracted by the construction of works eminently useful and productive of advantage commensurate with the cost, your committee are at a loss to perceive the impolicy or the injustice of bequeathing a debt, together with the corporate estate which will descend with it. It is common to compare nations and states to individuals, but this your committee consider an erroneous comparison; they differ in one essential particular.—Individuals are moral—communities, if not States, are the reverse.—The forms of government—the names of states are subject to the mutations which time effects on all things; but communities remain, and even the ruthless footsteps of war, respect, in general, the civil improvements of a country.

Your committee do not presume to consider these opinions as novelties or inventions; they are but deductions which wiser men have drawn from similar facts, and conclusions which all must arrive at who admit the facts. But there is a large and highly respectable portion of the community, your committee believe, who doubt the one and cannot of course admit the correctness of the other. Fully sensible of this fact, and fully aware that they owe to those opinions, however variant from, that consideration which they ask for their own—fully convinced that but a short time will elapse before experience will sanction those entertained by your committee, and remove the doubts of those who differ from them, they report a bill embracing smaller appropriations than usual. If they have erred in this,

even if the error remain uncorrected by the wisdom of the Legislature, the evils produced will be of limited extent. The lapse of another year will probably develop much new information, and test the value of speculative opinion respecting the future, and perhaps shed new light on the merits of contemplated objects.

In their deliberations your committee could not avoid paying *some* attention to the means of sustaining the high credit of the Commonwealth, while framing a bill, the enactment of which will necessarily involve a resort to a new loan, and while they decline any unnecessary arrogation of the duties of those to whom the subject is entrusted, they will only say that from their superficial view of the subject, it appears that the interest on the loans required for the appropriations contained in the bill reported, may be reasonably expected to be supplied by the premium on the loan, until the revenue arising from the tolls shall be sufficient for that purpose.

On the merits of the objects of these appropriations your committee will not dwell long. Those contained in the first section have a paramount and indisputable claim on the justice and wisdom of the Legislature.—None of the provisions of the remaining sections relate to improvements in a *new* direction; they are but parts of the original plan—most of them have for their ultimate object a connection with the inland seas of the west, and a participation in the rapidly increasing trade now floating or hereafter to float upon their waters.—Each will, when completed, so far as can be perceived, promote the interests of the Commonwealth, and certainly those of the citizens resident in the counties through which they will pass.

The improvement of so much of the West Branch of the Susquehanna, as will enable the owners of the coal mines to transport their valuable coal to and along the canals of the State, cannot be considered unimportant, as it will manifestly add to the revenues of the canals.

The survey of a route, by canal or rail road, or by both united, by way of the West Branch of the Susquehanna, and thence by the routes indicated, to unite, by way of French Creek, with the waters of the Allegheny, is believed to be expedient and proper. No survey embracing all these points being known to your committee, they feel no hesitation in recommending it to the Legislature.

Your committee have seen with much satisfaction, that the agents of the Commonwealth have reduced the tolls charged for the use of canals and rail roads to such a point, as to afford good reason to believe that Pennsylvania may enter the field of competition with a fair prospect of obtaining a full participation of the trade hitherto more exclusively enjoyed by her enterprising neighbors. Nothing, in the opinion of your committee, would be more injudicious than the continued imposition of high tolls. The revenue to be derived from this source, will not be in proportion to the magnitude of the charges, but (within certain limits) the reverse, as the low charges will be made on an increased quantity. Even were it not so, a wise government will always deem it far more important to confer benefits on its citizens, than to increase its revenue at their expense.

All which is respectfully submitted.

### CHESAPEAKE AND OHIO CANAL.

*Report of the probable revenue of the Chesapeake and Ohio Canal, made to the Baltimore Convention, Dec. 1834.*

Mr. Stewart, from the committee appointed to report as to the probable amount of tolls receivable on the Chesapeake and Ohio Canal, after it reaches the Coal Mines near Cumberland, and after its completion to Pittsburg, made the following Report:

That the committee have given the subject an attentive consideration, and the result is a firm conviction that the Chesapeake and Ohio Canal will afford a more profitable investment of funds than any other similar work of Internal Improvement in the United States; possessing, as it does, advantages in reference to *climate, distance, structure, and sources of revenue*, decidedly superior to any other constructed or contemplated. To satisfy the public of the correctness of this position, the Committee will not deal in (what is too common on such occasions) assumed facts and speculative reasoning, but they will content themselves with a brief and plain statement of well known and ascertained facts, about which there can be no controversy, and which they respectfully submit, without comment, leaving an enlightened public to supply the argument and the conclusions.

The object of the Chesapeake and Ohio Canal is to connect the tide water of the Atlantic with the Ohio and Mississippi, and ultimately with the Lakes, and as its revenue must, in some measure, depend upon its ability to maintain a successful competition with other similar works, the Committee will submit in the first place, a comparative view of the three great lines of communication between the Atlantic and the west, the New York, Pennsylvania, and the Chesapeake and Ohio Canals. The Committee are, however, far from indulging the erroneous idea that these works can be properly regarded as rivals, that the one can possibly supersede the other, or that their interests can come materially into conflict; on the contrary, a moment's reflection upon the immense increase of the population and commerce of the west must satisfy every one that the time is not distant when not only these, but additional communications, will be indispensable to give vent to this vast and increasing intercourse.

#### COMPARATIVE VIEW,

As to distance, time, lockage, dimensions, climate, and cost of transportation, on the New York, Pennsylvania, and Chesapeake and Ohio Canals, in connection with the Ohio River and the Lakes.

The distance from New York to the Ohio river, by the New York and Ohio Canals, is 1,008 miles—670 thereof canal, 145 river, and 193 lake navigation; on this line there is 1,877 feet of lockage—692 on the New York, and 1,185 on the Ohio Canal, and three transshipments, one at Albany, another at Buffalo; and a third at Cleveland.

From Philadelphia to Pittsburg, by the Columbia rail road and Pennsylvania canals, is 394 miles—276 by canals add 118 by rail roads; the ascent and descent on this route is 5,220 feet; and, by the Schuylkill, Union, and Pennsylvania Canals, the distance is 441 miles, ascent and descent 4,514 feet; 1,944 by locks, and 2,570 by inclined planes; and, as the latter route is found to be the cheapest for transportation, it is adopted for the purpose of this comparison. On this line there are two transshipments, one at Hollidaysburg, and the other at Johnstown.

From tide water at Washington City to Pittsburg, by the Chesapeake and Ohio Canal, is 341 miles continuous canal, lockage 3,215 feet; and when the canal shall have reached Cumberland, the distance from tide, to the navigable waters of the west, will be only 258 miles, viz: 186 miles by the Chesapeake and Ohio Canal, and 72 from thence, by the Cumberland road, to Brownsville, on the Monongahela, where steamboats now arrive and depart for New Orleans daily, for several months in the year, and on which the cost of transportation would be \$13 58 per ton, viz:

By canal 186 miles, at 3 cents per ton,	\$5 58
By Cumberland road to Brownsville, 72 miles,	7 00
By steamboats to Pittsburg,	1 00

\$13 53

The dimensions of the New York and Ohio and Pennsylvania Canals, are the same, viz: 40 feet at water line, 28 at bottom, and 4 feet deep. The Chesapeake and Ohio Canal is 60 feet at water line, 42 at bottom, and 6 feet deep, being 50 per cent, larger than the New York, Ohio, and Pennsylvania Canals, the cross section of the one is 306 square feet, and the other only 136, and the moving power differs in the ratio of 100 to 171. It is ascertained on the New York, Ohio, and Pennsylvania Canals, that freight boats travel from  $2\frac{1}{2}$  to 3 miles per hour, and having relays of horses, usually travel night and day, making from 60 to 70 miles in 24 hours. For the purposes of this comparison we will assume 45 miles as the average in 24 hours; the cost of transportation we estimate at 3 cents per ton per mile, (two for tolls and one for freight;) each transshipment is supposed equal to one day's delay, and to cost 12 cents per ton.

The trade of the lakes at Cleveland will have to travel 701 miles to New York, or 623 to Philadelphia, (182 by the proposed canal to Pittsburg,) or 523 miles to Washington city, by way of Pittsburg.

Applying the above facts and principles, the result is as follows:

Distance to Ohio river.	Time, days.	Cost per	Distance to Cleveland on Lake Erie.
1,008	22 $\frac{1}{2}$	\$30 24	701
441	10	13 23	623
341	7 $\frac{1}{2}$	10 23	523

And it will be observed that the above is the comparative result as to distance, time and cost, without claiming any thing for the Chesapeake and Ohio Canal, on account of its enlarged dimensions or for its continued navigation for one or two months in the year, after the New York Canal is closed by ice: nor have the committee added any thing to the delay or expense of transportation on the New York and Pennsylvania Canal, on account of three transshipments on the one and two on the other, which will certainly more than counterbalance any supposed advantage that can possibly be claimed in any other respect.

As doubts have been expressed as to the practicability of a continuous water communication by the Chesapeake and Ohio Canal, the Committee beg leave to remark, that repeated examinations and measurements, made during the driest seasons of the year by the United States Engineers, as well as those of the Company, have uniformly resulted in demonstrating that the supply of water at the summit level is abundant.—Mr. Sullivan, one of the Board of Internal Improvement, affirms, in his report, that the "supply of water capable of being brought to the summit level, is more than treble that required," and that the Canal is competent to the passage of tonnage sufficient to realize tolls, at the usual rates, equal to 5,500,000 dollars per annum, or 50 per cent upon its estimated cost: and more recent surveys have also demonstrated that the principal coal vein at Savage, and other points where opened, is within 48 feet of the elevation fixed for the tunnel; and from the indications of coal on both sides of the ridge, near the commencement and at the termination of the tunnel, the opinion is entertained that it may pass through a continuous coal vein of fifteen or twenty feet in thickness; if so, the coal would more than compensate for the whole expense of its excavation.

In England there are many tunnels nearly as extensive as that here proposed, and some exceeding it, viz: The Bridgewater canal has a tunnel of 4 miles in extent; Huddersfield 3; Derby 2; Ellsmere 2; Grand Junction 2; Hereford and Gloucester 2; Kent and Avon 2, &c.

Having thus established, by a statement of facts which

it is believed cannot be controverted, the decided superiority of the Chesapeake and Ohio Canal, in reference to *climate, distance, structure, and cost of transportation*, it remains for the committee to submit some facts calculated to show the probable amount of revenue or tolls receivable after the canal reaches the coal mines, and after it is completed to Pittsburg: and, in this respect, they think the superiority of the Chesapeake and Ohio Canal will be still more conspicuous.

The sources of revenue relied on are,

- 1st. Coal—by far the most productive source of revenue on all canals where found, in Europe and America.
- 2d. Lumber—abounding on this canal, and affording one of the principal sources of revenue on the New York Canal.
- 3d. Lime of the best quality, and at the cheapest rates made on the line of this work.
- 4th. Iron and other minerals, and marble, found in abundance, and of superior quality, on the margin of the Canal.
- 5th. The products of the Potomac Fisheries, equal to any in the Union.
- 6th. Rent of Water Power—being abundant for milling and manufacturing purposes.
- 7th. Agricultural produce from the Western and other States, and parts of Virginia, Pennsylvania, and Maryland.
- 8th. Merchandise, &c. for the Western States.

And first of Coal. The committee lay down this position with perfect confidence, that *bituminous coal of superior quality can be delivered on tide water for a less sum by this Canal than it can be delivered at any other port on tide water in the United States.* If this be true, it follows as a matter of course that there will be no limit to the demand for exportation but the capacity of the Canal to deliver it.

Let the truth of this be tested by adopting the prices paid for mining, tolls, and transportation on Canals now in operation in Pennsylvania and New York.

The Chesapeake and Ohio Canal will penetrate and pass through coal banks from ten to twenty feet in thickness on the margin of the Potomac above Cumberland, from which the coal can be thrown into the coal boats with a shovel; and to show the inexhaustible supply at the Savage coal mines, the Committee refer to the following extract from the report of one of the Chief Engineers, N. S. Roberts, Esq. in 1829, to the Board of Directors, in which he says, "The coal district, thus accommodated, would be not less than five miles wide, covering a surface of more than two hundred square miles. Over at least one-fifth of this, it is believed, the thick vein of coal extends, which measures, where it is now opened, at least thirteen feet thick. But the coal mines that could be opened, within five miles of Westernport and Savage, would yield coal to an immense amount. As each square mile of the great vein alone would yield more than two hundred millions of bushels of coal, or sixty millions of tons, and if it could be exported at the rate of five hundred tons per day, it would require four hundred years to exhaust one square mile of the great coal vein! Iron ore, of excellent quality, is said to abound in this coal district; and with the facilities of a canal transportation, together with the cheapness of bituminous coal, charcoal, and subsistence, in a very healthy country, would be an inducement to the enterprising of our citizens to extend the manufacture of iron to a great amount, and thereby improve and give great value to the water power that might easily be created on Savage river and the Potomac, for all the manufacturing and mechanical purposes of a very extensive population."

It is a well known fact, that, on the Monongahela river, coal excavated from similar mines, is now delivered at thirteen steam mills and factories, at one cent per bushel. It is presumed it will not cost more, under

similar circumstances, to deliver it in a coal boat on the Potomac; but let this sum be doubled, and say that coal in boats will cost two cents, 2 cts. per b.

Tolls.—The tolls charged on the Pennsylvania canal for transportation of coal, is half a cent a ton per mile, which, at 28 bushels per ton, will be nearly 4 cts. per b.

Freight.—A boat carrying 1,680 bushels, travelling two miles per hour or 48 miles in 24 hours, (less than the usual speed,) will reach tide in 4½ days; it will require, say two men, \$2, a boy and horse 75 cents each, making \$3 50 per day, or \$15 75 for the trip, equal to nearly 1 do. do.

It is presumed that the returning freight from Washington and the Baltimore rail road will at least pay expenses, but suppose there be no return loading, charge as above, 1 do. do.  
Profits.—Add for profits \$32 per load more than 25 per cent on the whole capital employed, 2 do. do.

Total at tide, 10 cts. per b.  
But suppose the canal to terminate at Cumberland and the coal to be carried 7½ miles on a rail road, and to cost in the boats 4½ cents instead of 2, as above difference, 2½

The committee have thus adopted the most liberal allowances, more than they believe will be the actual cost, and they feel confident that the strictest scrutiny into all the elements of the calculation cannot increase the price they have adopted.

If then the bituminous coal from Cumberland can be delivered at tide, for this sum, of course it can be transported coastwise to all our Atlantic ports and towns cheaper than it can be obtained from any other part of the world; and if so, can there be any assignable limit to the demand?

Let us see whether this position is sustained by facts. The cost of transporting coal from Philadelphia to Washington, (as a regular business and not as ballast,) is \$1 50 per ton, or 5 cents per bushel; to Baltimore, coastwise or by rail road from Point of Rocks, 4 cents per bushel: to Boston \$2 per ton, or 7 cents per bushel, and it may be carried to Charleston, or the most distant of our sea ports for 8 cents per bushel, which is more than is received by importers from Liverpool. viz: cost at Liverpool 12½, duty 5 cents, deduct, also, insurance, commissions, wharfage, &c., and it leaves less than 8 cents for freight. Apply these facts, and the cost of Cumberland coal will be in our principal cities as follows. viz:

Washington, Alexandria, and Georgetown, (per bushel) 12½ cts.

Present price \$7 per ton, or 25

Saving, 12½

Baltimore it will be 16 cts, viz:

At Washington, 12½

Freight, 4

16½

Present price 25

Saving, 8½

Philadelphia it will cost 17½ cents, viz:

At Washington 12½

Freight now paid 5

17½

The price of bituminous coal is now \$7 per ton, or

25

Saving, 7½

[At Philadelphia, Anthracite is \$5 per ton, or 17½ cents per bushel; so that the Cumberland will not affect the Anthracite, but merely supply the bituminous coal, required for many uses to which the Anthracite is inapplicable, viz: gas, coke, Smith's shops, steam purposes, &c.]

In Boston it would cost 19½ cents, viz:

In Washington City, 12½

Freight, 7

19½

Present price in Boston \$9 per ton, or (per bushel)

32

Saving, 12½

Thus it appears, from well authenticated facts, collected with great pains, that Cumberland coal can be delivered, coastwise, at all our Atlantic cities and towns, cheaper than it can be obtained from any other part of the United States, or Europe; and of course the capacity of the canal to furnish it will be the only limit to the supply required.

What, then, will be the capacity of the Canal, and the amount of tolls? It is stated by Sir John Sinclair, in his statistics of Scotland, that there was transported in 1824, to the city of Glasgow, (with a population of 147,043,) on the Monkland Canal alone, 1,690,653 tons of coal, equal to 47,338,284 bushels, which, at the rate of half a cent a ton a mile from Cumberland to Washington City, would amount to \$1,893,529, equal to 30 per cent, upon \$6,000,000, the whole estimated cost of the Canal to the coal mines at Cumberland. The dimensions of the Chesapeake and Ohio Canal are greatly superior to those of the Monkland Canal. The tonnage on the Schuylkill Canal, engaged principally in the transportation of coal, was equivalent to 12,483,672 bushels; and the coal actually consumed in Philadelphia, in 1833, (independent of the amount exported from thence) amounted to 11,565,000 bushels. This amount alone, if transported on the Chesapeake and Ohio Canal, would have yielded at a half cent a ton per mile, 462,600, nearly 8 per cent, on its entire cost.—And it is ascertained that the City of Pittsburgh, with a population, at the last census, of 12,568 souls, consumed, in 1833, 7,665,300 bushels of coal, much of it in her numerous manufacturing establishments. The population to be immediately supplied with Cumberland coal, is as follows:

The District of Columbia, 40,000

The City of Baltimore, 80,620

The counties and towns in Virginia and Maryland, bordering on the Potomac and Chesapeake Bay—population. 537,650

Aggregate, 678,270

Suppose the whole of this population, together with the amount exported to other places, shall not amount to more than thrice the quantity consumed in the city of Pittsburgh, whose population is not one-third of that of the District of Columbia alone, scarcely two-thirds of that of the city of Washington; and the tolls at half a cent a ton per mile would amount, on this limited quantity, to 919,336 dollars, equal to 15 per cent, on 6,000,000 dollars, the entire cost of the canal to Cumberland. These calculations may seem extravagant, but the facts on which they are founded are well established; besides the fact is notorious, that the tolls on some of the coal canals in England, amount to 40 per cent upon the capital, and shares of stock of £100 are selling in the market for £725. The Mersey and Irwell Canal is an instance of this kind. Coal is, however, but a single item: superadd to this the various other

sources of revenue relied on, *lime, iron, lumber, marble, merchandise, &c.* and who can for a moment doubt that this Canal, when it reaches the coal mines, will yield an ample revenue on the capital invested? And can the United States and the States immediately interested, hesitate to extend, at once, the aid necessary to secure the speedy extension of the Canal, now two-thirds completed, to the coal mines? And the more especially when it is recollected that they have already invested more than two millions of dollars in this work, which, with three or four millions expended on the Baltimore and Ohio rail road, must remain, in a great measure, unproductive, until the Canal is carried at least to Cumberland.

But these considerations (merely pecuniary) dwindle to a point, when compared with the higher and nobler objects of uniting and binding together by the ties of interest and intercourse, the great geographical divisions of our country; of connecting, by the nearest and best communication that can be devised, the metropolis of Maryland and the seat of the Federal Government, with the great valley of the Mississippi and the Lakes, thereby attracting a portion of their rich and abundant commerce in this direction, and at the same time opening and rendering productive the richest mines of coal and iron in America, now buried and useless in the bowels of the Alleghenies. These objects alone are worth the whole sum required, even if the investment should never yield one dollar of revenue.—When the canal reaches the Coal mines its completion to Pittsburgh is secure—its practical results, the benefits and blessings it will every where diffuse, will commend it to the favor of all; but independent of this the high price of the stock in the market, (at least equal to that of the Schuylkill canal, now more than 100 per cent above par,) would at once secure the subscription by States and individuals, independent of the United States, to the balance of the stock necessary for its entire completion. If the means were now afforded to extend the work to Cumberland, it is confidently asserted by practical engineers that the work could be completed in 18 months.

Having shown, as they trust satisfactorily, that coal alone will yield an ample revenue, the Committee will notice briefly the other sources of revenue referred to above: The second of which is

2. *Lumber.*—By referring to the various reports descriptive of the country and its resources, through which the canal passes, it will be seen that the finest forests of timber in the world are found skirting the Canal for more than 100 miles of its extent, especially on the Virginia shore, where water power is found in abundance on the spot to convert it into lumber. In 1826 there were 150,226 tons of lumber transported on the New York Canal, which if carried 125 miles on the Chesapeake and Ohio Canal, at a cent a ton per mile, would yield \$187,780 per annum, equal to three per cent on the capital.

3. *Lime.*—Lime stone and coal are found together in vast quantities on this canal, under similar circumstances. Lime is made and sold at the kiln in the West for 4 cents per bushel: double this, and say it cost 8 cents, and 6 cents for transportation, the same as coal, and it can be delivered in Washington city for 14 cents per bushel. At this price it would not only supply all the common uses of lime, but constitute the cheapest and best manure to fertilize and restore to the highest state of productiveness the now barren and impoverished lands on the Potomac and Chesapeake, both in Maryland and Virginia, and of course would become a source of immense revenue on the Canal, second perhaps only to coal. The amount of tolls on this article we will not attempt to estimate.

4. *Iron, Marble, and other Minerals of the Alleghenies.* The fact that Iron ore is found in the greatest profusion,

and of the best quality in the coal region, is well ascertained, and that marble of superior quality abounds on the line of the canal is equally certain. The beautiful marble composing the columns of the Capital was quarried out of the bed of the Canal, about 42 miles from the city. The tolls on these articles the committee will not undertake to compute, but it is obvious that they would be very considerable.

5. *The Fisheries.*—The revenue which may accrue from the fisheries cannot be computed with any kind of certainty; but when the facility and cheapness with which they can be transported, and the low rate at which they can be supplied at the Potomac Fisheries, no doubt it would be considerable. The price of herring is said to be 25 cents per 1000, and shad \$1 50 per 100, and the quantity is so great that fish is a common manure to enrich the lands in the vicinity of the fisheries on the Potomac. Fish could be profitably carried to Cumberland and as back loading in canal boats for 25 cents per barrel to Cumberland, which is double the amount paid for Coal, the weight being only equal to 2½ bushels of coal, the freight and tolls of which are estimated at 5 cents per bushel.

6. *Water Power* will be equal to almost any demand, and its productiveness must depend upon the number of manufacturing establishments which the very reduced price at which fuel, the raw materials, and the subsistence of labor can be supplied by the canal, will bring into existence along its line, and at its termination.

7. *The productions of Agriculture.* And 8th. *The transportation of Merchandise, passengers, &c.*—The Committee will not extend their report (which they are anxious to make as brief as possible) by going into a detail of the infinite variety of facts, calculated to show the prolific nature of these very fruitful sources of revenue. It is well known that they alone contribute most of the tolls received on the New York, Pennsylvania, and Ohio Canals, deriving, as they do, very little from coal and other minerals abounding on this; besides, when we advert to the other advantages enjoyed by the Chesapeake and Ohio Canal, in reference to *distance, dimensions, climate, and continuity* of canal transportation, no one can doubt that it will enjoy a liberal share of the commerce and trade of the western states, whose population, judging from the past, will soon exceed that of the East; but, even if this canal were in all respects inferior to those of New York, Ohio, and Pennsylvania, their absolute inadequacy to give vent to the increasing trade and commerce of the West, resulting from its growth in wealth and population, would force upon this work tonnage equal, in time to its utmost capacity.

Such are the bright prospects to which the patriotic and enlightened contributors to the Chesapeake and Ohio Canal may confidently look forward, if the means of its completion are afforded—and the Committee appeal to every candid man to say, whether the facts stated have not fully sustained the declaration with which they set out, that this canal will afford a more profitable investment of funds than any similar work in our country—justifying an appeal even to private capital, looking alone to profit, to seek the Chesapeake and Ohio Canal, as affording a more safe and productive investment of funds than any other now open to them in the United States.

Coal Canals have been invariably profitable in all countries, often exceeding in tolls the most sanguine anticipations of the friends of the Chesapeake and Ohio Canal. In Great Britain, the profits on Coal Canals have varied from 10 to 170 per cent, per annum, as appears by the following list, taken from a London price current of Canal stocks, of October, 1832:

	Share.	Selling Price.	Div'd.
Coventry,	£100	1070	44
Erewash,	100	1000	58
Forth and Clyde,	100	470	20
Loughborough,	100	3500	170
Neath,	100	410	25
Oxford,	100	750	32
Stratford & Worcestershire,	140	700	40
Stroudwater,	145	995	22
Trent and Mersey,	100	1710	75
Grand Junction,	100	245	10
Leeds and Liverpool,	100	365	12

beside many other mostly employed in the transportation of Coal, some of them 130 miles long, and having one-third more lockage than occurs in the Chesapeake and Ohio Canal between tide water and Cumberland.

And even in this country they have been already attended with similar results. The Schuylkill Canal, in 1825, when it reached the coal regions, after encountering the greatest difficulties and discouragement, its tonnage amounted to only 5,306 tons—yet, after the mines were opened, and rail roads constructed to transport the coal to the Canal, the tonnage increased in a few years to 445,849 tons, and the tolls to 328,481 dollars, besides 16,673 dollars for water power, making 345,154 dollars; equal to 12 per cent on its original cost; and the stock rose from the lowest depression to 160 per cent above par, viz: 130 dollars for shares of 50 dollars. The New York Canal, in 1833, after very large reductions on its tolls, yielded 1,422,695 dollars of revenue, equal to 15 per cent on 9,500,000 dollars, its original cost. In 1825 the Canal Commissioners reported that, according to an estimate made, the tolls would pay the whole cost of the Canal in 1836; that the tolls would then amount to one million of dollars per annum, that in 1846 they would amount to 2,000,000 dollars, and in 1856 to 4,000,000 dollars; and that if fully employed, they might reach 9,031,000 dollars a year, and thus far this calculation has been more than realized. The debt is already discharged, and although the tolls have been reduced nearly one-third, they amounted, in 1833, to nearly a million and a half of dollars.

Thus has New York, by a wise policy not only made herself "the empire state," by increasing her population and her power, and adding countless millions to the wealth of her people and her metropolis, but she has superadded to all this an annual revenue derived from her Canal, free from all charges, sufficient to discharge all the ordinary expenses of her state government, without levying one cent of tax upon her people. And why shall Maryland and Virginia hesitate to realize similar advantages by the completion of the Chesapeake and Ohio Canal, proved by the clearest testimony to be decidedly superior, being a much shorter, more direct, and central communication from the Atlantic to the West, and possessing in the Coal trade, an inexhaustible source of profit in addition to all those enjoyed on the New York Canal.

Were this work to be now commenced for the first time, there ought to be no hesitation: And, surely, after it has been constructed in the most splendid and durable manner, surpassing any similar work in the world for more than 100 miles on its way to the West, shall it be suffered to stop or languish on its journey? Will its early patron, the United States, whose seat of Government it connects with the valley of the Mississippi, and the Lakes, constituting an enduring bond of national union, promoting alike the national defence in war and prosperity in peace—will she, with her ample means, suffer this noble enterprise to be arrested in its progress for want of that aid which she can so easily afford, without creating one cent of taxation, or one dollar of debt, and the more especially, we ask, can this aid be justly withheld, when it is recollected that

the subscription of a million of dollars by the United States, at the commencement of the work, was made with an express understanding, as appears by the report of the Committee, that the United States were to contribute "a moiety of its entire cost." Three millions have been subscribed with this understanding, and after individuals and corporations have been thus induced to contribute their private means to aid in the accomplishment of a great national enterprise, will it not be a violation of every principle of good faith and common honesty to withhold further aid, and thus defeat the work, and ruin the individuals and corporations induced, in this way, to embark their means with the Government in a great national undertaking? These considerations belong to the subject, and cannot be overlooked or disregarded by an enlightened and just Government. Let the Government, then, influenced by a liberal and wise policy, fulfil its engagement, (implied if not express,) to contribute a sum equal to all others, and the means will be at once afforded to complete the work to Cumberland.

All which is respectfully submitted. In behalf of the Committee,

A. STEWART, Chairman.

NORRISTOWN, PA. Feb. 11.

**MOCK SUN.**—A beautiful phenomenon of this kind appeared in the eastern horizon, on Sunday morning last, conveying all the appearance of two distinct suns at a little distance from each other. An easy and perceptible difference distinguished them however,—the Sun being considerably brighter than the mock or apparent sun which was of a more reddish cast.

**THE WEATHER.** for several days past, has been excessively cold. Yesterday morning, we are told, it was eight degrees below zero, and this morning thirteen. We have not, ourselves, looked at a thermometer, but are satisfied that the weather, during the last three days, has been colder than for many years previous. The rivers are fast closed with ice, but there is now (Monday, 11 o'clock, A. M.) a bright sun, and a prospect of mild weather. Steamboat navigation will probably again open about the 20th or 22d instant.—*Fitts' Gaz.*, Feb. 9.

**THE WEATHER.**—We have had another spell of cold weather during the week. On Sunday, Feb. 8th, at 5 A. M. the thermometer stood at 6 degrees below 0—and on Monday morning at the same hour at 4 degrees below 0.—Snow fell on Saturday last, to the depth of about three inches.—*Miners' Journal*, Feb. 14.

#### LYCOMING COAL COMPANY.

*Extract from the Journal of the Senate of Pennsylvania, Volume 2, page 49.*

Abstract of the account of the Lycoming Coal Company to October 31st, 1834.

Amount of Capital stock paid into the funds of the Company,	\$160,500 00
Amount received from sales of Coal, &c.	7,948 93
	<hr/>
	\$168,448 93

Amount expended for land, building rail road, &c.	\$167,946 26
Cash on hand this day, October 31,	502 67
	<hr/>
	\$168,448 93

Signed,

CHARLES RUSSEL LOWELL,

Treas. and Clerk of the Lycoming Coal Co.  
Nov. 20th, 1834.



Statement of Missions into the Philadelphia Almshouse, during the year 1834. Also, their places of birth, and the number remaining in the Institution on the 31st ult.

AMERICAN PAUPERS.

	Philadel- phia.	Pennsyl- vania.	New Jersey.	New York.	Conne- cticut.	Rhode Island.	Massa- chusetts.	New Hampsh.	Ver- mont.	Maine.	Delaw- are.	Mary- land.	Vir- ginia.	North Carolina.	South Carolina.	Geor- gia.	Louis- iana.	Ohio.	Dist. of Colum.	Total.
Males,	512	149	75	50	11	3	20	6	2	3	67	60	10	1	4	2	4	2	4	983
Females,	371	93	61	22	1	2	3	1	1	2	82	28	12	4	1	2	2	0	3	693
Total,	883	242	136	72	12	5	23	7	3	5	149	88	22	5	5	4	6	2	7	1676

TOTAL AMERICAN PAUPERS.

Male, born in Philadelphia,	512
Do. do Pennsylvania,	149
Other states of the Union,	322
Female, born in Philadelphia,	371
Do. do Pennsylvania,	93
Other states of the Union,	229
Males, 983, Females, 693,	1,676

Of the Paupers from Delaware, Maryland, and Virginia, 75 per cent. are Negroes, and of the entire number admitted during 1834, about 12 per cent. were coloured persons.

FOREIGN PAUPERS.

	Ireland.	Eng- land.	Wales.	Scotland.	British America.	Ger- many.	France.	Hol- land.	Swe- den.	Nor- way.	Den- mark.	Prussia.	Poland.	Italy.	Africa.	Switzer- land.	West Indies.	Un- known.	Ocean.	Total.
Males,	937	132	12	54	15	98	11	4	4	3	2	2	1	1	2	3	7	64	2	1354
Females,	366	47	5	15	4	30	2	5	0	0	0	1	0	0	3	0	12	47	4	541
Total,	1303	179	17	69	19	128	13	9	4	3	2	3	1	1	5	3	19	111	6	1895

Of the foreign paupers there were, from the British dominions alone,

Males,	1,150
Females,	437

Total of male Paupers admitted during 1834, 2,337  
Do. Female do do 1,214

There remained in the house on the 31st ult.—

Males, adults,	770
Females " "	533
Children of both sexes,	79
	1,382 persons.

1,567: within 89 of the entire number of American Paupers, and of the residue, 75 per cent. have been reduced to pauperism by intemperance. On the 14th of this month, the population had increased to 1,548 persons in the Hospi- tal and Almshouse.

The children in the Asylum are not included in the above account. There are about 125 children in that department, making the entire population of the Institution on the 4th inst. 1,673 persons.

January 10th. 1835.

By order of the Board.  
GEORGE W. JONES, President.

From Miners' Journal.

## COAL TRADE.

*Consumption of Coal in the city of New York.*—It appears by the report of the city Inspector that the amount of Anthracite Coal consumed in the city of New York, for the year 1833, amounted to

53,882 tons.
Virginia coal 12,808
Foreign coal, about 30,000

*Anthracite Coal Trade of the United States.*—Quantity of Coal sent to market from the different regions in the following years.

	Quantity sent to market.	Annual Increase.
1820	365 tons.	
1821	1,073	608
1822	2,440	1,167
1823	5,823	3,583
1824	9,541	3,718
1825	33,393	23,852
1826	48,047	14,654
1827	61,665	13,618
1828	77,395	15,730
1829	105,083	27,688
1830	181,000	75,917
1831	177,000	decrease.
1832	379,000	202,000
1833	488,000	119,000
1834	374,186	decrease.

*Foreign Coal imported into the United States.*—Annual quantity of Coal imported into the United States, in the following years, ending on the 30th of September:

	Busbels.	Tons of 28 bushels.
1821—22	627,737 equal to	22,122
1822—23	970,828	34,523
1823—24	854,983	30,433
1824—25	764,815	27,228
1825—26	722,225	25,645
1826—27	970,021	34,605
1827—28	1,127,388	40,257
1828—29	906,200	32,302
1829—30	1,272,970	45,293
1830—31	1,640,295	58,136
1831—32	1,022,245	36,509
1832—33	2,358,037	84,144
1833—34	1,626,185	58,078

*Importation of Foreign Coal.*—It will be observed by table in this week's paper, that the importation of Foreign Coal for the year ending Sept. 30th, 1834, though less than the year previous, amounted to 1,626,185 bushels, being equal to 58,078 tons, notwithstanding the low price at which Anthracite Coal sold throughout the whole year 1834. The value of 58,078 tons of Coal at \$6 per ton, would be three hundred and forty-eight thousand four hundred and sixty-eight dollars, which amount of money is sent out of the country for an article of which we possess an abundance of a better quality, and with which our markets are now well supplied. Great Britain and her colonies, from whence this coal is derived, has imposed a prohibitory duty of seven dollars per chaldron on all foreign coal, to protect her own trade. But attempts are now being made to induce the United States Government to lower the duty on all foreign coal—thus encouraging the trade of other countries, and depressing our own. When will the eyes of our statesmen be opened upon this subject?—*Id.*

*Foreign Coal.*—Price of Liverpool Coal in the New York market, on the first of December, from the year

1815, to the year 1833, together with the rates of duty paid.

	Per chaldron.	Duty.
1815	\$23 00	\$3 60
1816	14 00	1 80
1817	11 00	do
1818	11 00	do
1819	11 00	do
1820		do
1821	14 00	do
1822		do
1823	12 75	do
1824	15 00	\$2 16
1825	14 00	do
1826	10 00	do
1827	13 00	do
1828	13 00	do
1829	12 00	do
1830	8 00	do
1831	13 00	do
1832	13 50	do
1833	14 00	do
1834	11 00	do

The average price of Anthracite coal in New York market, is about \$7 50 per ton—one ton of Anthracite being equal to one chaldron of Bituminous Coal.

The price of Liverpool Coal, as appears from the above, is \$11 per chaldron. The difference in price, therefore, is \$3 50, which sum on 53,000 tons, the annual consumption of Anthracite, amounts to a saving to the citizens of New York, of no less than \$186,500.—If to this amount be added the aggregate of foreign coal consumed, say 30,000 tons, the saving would be increased to upwards of \$200,000. Notwithstanding these facts, a member from New York, in the House of Representatives, (Mr. Ferris) has seen fit to offer a resolution directing the committee of Ways and Means to inquire into the expediency of repealing the duty on foreign coal. The resolution has been ordered to lie on the table, and we do not believe that there is any probability of its passage. Among other statements displaying extensive information on the subject, made by this gentleman in his accompanying remarks, he says—"from the best information he had been able to obtain Anthracite Coal might be sold in New York at \$5 per ton, and yield a fair profit!" No comment is necessary upon such an assertion.—*Id.*

## EDUCATION SYSTEM.

The following School Bill has been introduced to the Legislature of this State.

*House of Representatives File. Mr. Pollock—Select Committee.—Order, Friday, February 27. Read February 25, 1835.*

SUPPLEMENT to an act, entitled "An Act, to establish a general system of Education, by Common Schools."

Section 1. Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania, in General Assembly met, and it is hereby enacted by the authority of the same, That the taxable inhabitants of every School-bound, in every School district in this Commonwealth, which has been laid off in pursuance of the provisions of the act to which this is a supplement, or which shall be laid off in pursuance of the provisions of this act, shall constitute a community or society for the purposes of general elementary education—each taxable inhabitant being an equal member thereof.

Section 2. The stated meetings of said societies, shall be held on the first Mondays of May and November, in each year, of which due notice shall be given, in such manner as the societies shall direct.

Section 3. A majority of the taxable inhabitants, in any School-bound, convened on fair and general notice, shall constitute a lawful meeting for the transaction of

ordinary School business—and the lawful acts of a majority of said meetings, shall be valid and binding on the whole society.

Section 4. At the first stated meeting of each Society, they shall choose three School Committee men, one of whom shall be the President, and one the Secretary, and one the Treasurer of said Society, for the term of one year. The President shall preside in the meetings of the Society, call extra meetings, and visit and inspect the Schools. The Secretary shall keep a book, in which he shall record all proceedings and regulations of the Society. He shall keep a roll, or list of the names of the members, which shall be called over at each meeting, noting on the minutes those who are present. He shall make out, and, in conjunction with the President, shall attest the annual returns of the Society. The Treasurer shall receive, collect, and pay over, to the order of the President and Secretary, or to his successor, all the moneys of the Society. He shall keep regular and true accounts of all receipts and expenditures for School purposes, which shall be open to the inspection of the Society, or any of its members.

Section 5. It shall be the duty of the School Committee men, to examine and employ teachers—superintend the School, and annually, on or before the first Monday of November, make report to the County School Board, according to forms to be furnished to them for that purpose.

Section 6. Whensoever any School society shall have been thus formed and organized, they shall report the fact to the county School Board, with a list of their members, and the names and officers of their committee men. They shall have power, at any semi-annual meeting, to determine when, in what manner, and by what means, they will erect, purchase, or rent a School house, and provide the means to defray the expenses thereof. They shall also determine how much money shall be raised and expended for School purposes, during the ensuing six months, and shall have power to raise that amount by voluntary contribution: the assessment and collection of a tax proportioned to their respective state or county tax, or by a poll tax, of a given sum, on each taxable inhabitant, or partly by each or either mode, as to a majority of said meeting shall appear most equitable and convenient.

Section 7. Whensoever the school committee men, of any school society, shall have made the returns required by this act, and shall make it appear to the satisfaction of the county School Board, that they have expended for School purposes, within the current year, a sum equal to three times the amount of their quota of the School fund of the commonwealth, for said year, and that the School has been kept open, and equally free, for the instruction of all within its bounds, desiring to be taught, they shall receive a check on the county treasurer, for the amount of said quota, and all arrearages of former quotas to that date, and all moneys received by them, by virtue of this section, shall be expended by them in payment of tuition only.

Section 8. The county commissioners of each county, shall constitute a county School Board. It shall be their duty to apportion to each township, borough or ward therein, in proportion to the taxable inhabitants thereof, their respective quotas, of the School fund of the commonwealth, and the said quota shall be equally divided amongst the School societies, of such township, borough or ward. They shall draw their warrants on the county treasurer, for the amounts payable to each School society, from time to time, as said societies may comply with the conditions hereinbefore mentioned.—They shall keep a book, in which they shall register every School society in the county, formed and organized as herein directed, designating them by the name of the township, borough or ward, and the numbers, one, two, three, &c. They shall open, and keep a true account of all moneys due, and becoming due, from

time to time, to each School society, and charge them with the amount of all warrants drawn in their favor.

They shall make out, and transmit to the general superintendent of Schools, annually, on or before the third Monday in November, a complete return, agreeably to forms to be furnished them by said superintendent, of the condition of the several School societies in their county—the moneys raised, and expended by them for School purposes, and the amount of warrants drawn in their favor.

Section 9. The treasurer of each county, shall annually, on or before the 3d Monday of November, make a true account for the amount of the warrants drawn on him, by the county School Board, which being examined and compared with the accounts kept by said Board, and certified to be a just and true account, by the prothonotary of the proper county, under the seal of the court, shall be transmitted to the general superintendent of Schools, who shall draw his warrant on the state treasurer, in favor of said county treasurer for the amount.

Section 10. The General Superintendent of Public Schools, is hereby authorized, and required, to open an account with each, and every county in this Commonwealth, in which their proportion of the School fund, authorized by law, to be distributed, shall annually, be passed to their credit, respectively, and in which the amount of his orders on the State Treasurer, in their favor, shall be charged to account—and no transfer of the amount standing to the credit, of any county, or any part thereof, shall, at any time, or for any purpose, whatever, be made to the credit of any other county or counties, but shall be, and remain in the treasury, as a fund set apart, exclusively for the purposes of general elementary education, and accumulating for its benefit, until the said county shall think proper to draw it therefrom, in the manner herein before mentioned.

Section 11. No transfer of the amount standing to the credit of any township, borough or ward, or any school society therein, on the books of the county school board, or any part thereof, shall at any time, or for any purpose whatever, be made to the credit of any other township, borough, ward, or school society, but shall be, and remain as a fund set apart exclusively for the purposes of general elementary education, and accumulating for their benefit, until it shall be drawn by them, in the manner, and for the purposes herein before mentioned.

Section 12. In all cases where any township, borough or ward, in this commonwealth, may have neglected to elect school directors agreeably to the provisions of the act to which this is a supplement, or where having elected them, they have refused or neglected, and continue to refuse or neglect to divide the said townships, boroughs, or wards, into convenient school bounds, and designate the places where the schools shall be taught; the constables of such township, borough, or ward, shall annually, in their advertisements for the election of supervisors or constables, give notice, that an election will be held at the time and place of the said annual election, to elect six school directors, for the purposes aforesaid.

Section 13. Whensoever any township, borough, or ward, shall have been divided into convenient school bounds, and the places where the school shall be taught, shall be designated by the school directors aforesaid, they shall make out a report, describing the boundaries of each school bound, and the location where the school is to be taught, as also a list of the taxable inhabitants then residing within said bounds, which report shall be filed with the prothonotary of the county, for future reference. The school directors, in performing the duties aforesaid, shall have special reference to school societies already formed, and school-houses already built, where, in their opinion, they

could be conveniently made to answer the purposes of general education.

Section 14. The taxable inhabitants of any township, borough, or ward, feeling themselves aggrieved by the decisions of the school directors, as to the boundaries of their school societies, or the location of their school-houses: And where, from increased population, at some future period, or other good cause, they may deem a new school bound necessary, then, and in either case, they may apply by petition, to the court of Quarter Sessions, for the proper county, who shall have power to appoint disinterested and competent persons, to view and examine said boundaries and locations, for school houses, or the necessity or propriety of a new school society, as the case may be, and their report, when made under oath or solemn affirmation, when sanctioned by the court, shall be final and conclusive to all concerned.

Section 15. Every School society formed and organized agreeably to this act, shall, for the purposes of general elementary education within its bounds, be a body politic or corporate, with the general powers and disabilities incident to corporations, and the treasurer thereof shall have power to collect such tax as may be ordered by said society upon the property or persons of its members, in the same manner, and under the same restrictions, as other taxes are now, or may hereafter be collected, and he shall receive out of the proceeds thereof, such compensation as the society may adjudge to be just and equitable.

Section 16. Whensoever any School society in this Commonwealth, in pursuance of the provisions of this act, shall have assessed a tax on any unseated lands or real estate, where the amount cannot be collected from the tenant, agent or owner, the treasurer of said school society, shall make out a list thereof, with the amounts assessed thereon respectively, which shall be attested by the President and Secretary of said society, and transmitted to the county commissioners of the proper county, who shall add the sums thus returned to the county rates and levies assessed, or to be assessed on such property—and when the said sums shall have been collected with the said county rates and levies, the residue, after deducting the ordinary charges for collection, shall be paid over to the treasurer of said school society.

Section 17. So much of the act to which this is a supplement, as requires of the school directors the performance of any duties other than the division of their district into school-bounds, and the location of school houses, as also every part of said act as is altered or superseded, is hereby repealed.

From the Pittsburg Gazette.

#### THE WEATHER.

Memoranda of the coldest days, those in which the mercury fell below zero, in Fahrenheit's Thermometer, in the month of January, and up to the 15th of February, 1835. The instrument was exposed in the free, open country air, at Sewickly bottom, in the valley of the Ohio, 14 miles N. W. of Pittsburg.

	At Sunrise, below Zero.	Noon, above Zero.	Sunset, above Zero.
Jan. 5	4	15	17
" 8	3	18	16
" 9	4	26	26
" 10	2	28	28
Feb. 4	2	24	14
" 7	11	12	Zero.
" 8	5	10	5
" 9	21	12	7
" 10	9	24	16
" 12	Zero.	34	26

From these notes, it appears that we have had more

extreme cold days this winter, than have been observed by the writer during his observations of nearly thirty years past. In the cold days of January, this district of country was free of snow. In those of February, the country was lightly covered with snow; and, being windy, was the more sensibly felt. S.

February 16, 1835.

From the Village Record.

#### DIARY OF THE WEATHER—FOR JAN. 1835.

The heavy fall of snow in the latter part of December, was followed by an unusually cold spell of weather. From the evening of the 2d, until noon of the 11th of January, the mercury in the thermometer was continually below the freezing point, and on some mornings it was several degrees below zero. So many days in succession of such severely cold weather, have rarely, if ever occurred heretofore, in this region of country.

The Brandywine was completely icebound; so that persons could travel for miles upon its surface without stepping on the shore. Upon examination on the 12th of the month, the thickness of ice was ascertained to be 10 inches. The morning of the 5th was the coldest—being 6 degrees below zero, at sunrise on that morning.

The warmest days were the 27th and 30th, being 60 degrees above zero, at noon on the former, and the same at sunset on the latter day.

The average throughout the month was 2 degrees lower than last month, being 24½ degrees at sunrise, 41 degrees at noon, and 26 degrees at sunset.

There were 18 whole clear days—3 cloudy, and 4 on which rain fell. No fall of snow during the month. The snow which fell in December, and which continued with such little diminution as to afford good sleighing until the 13th, was principally swept away by a heavy fall of rain, on the night of that day.

C. H.

W. Bradford Boarding School, }  
Feb. 2, 1835.

THE WEATHER.—Sunday and Monday mornings last, were the coldest experienced in this place for many years. On Sunday morning, the thermometer in this borough was 13 degrees below zero, and on Monday morning 14, since which time the weather has moderated considerably. The river at this place closed on Sunday, and the ice is now strong enough for the heaviest burthens. During the cold weather in January, which was so intense to the eastward, the thermometer did not fall lower than 2 or 3 degrees below zero in this borough. The Rev. E. D. Barrett, who resides at Glade Run, 17 or 18 miles east of this, has furnished us with the following statement of the thermometer for the first twelve days of January, which shows a greater degree of cold than we have seen noticed west of the mountains, though not so great as at some places east of the mountains of similar and even lower latitude—for instance, at Washington City it was 16 degrees below zero, and at Reading, Pa. 22.

D. M.	7 A. M.	3 P. M.	10 P. M.
1	16°	36°	34°
2	30	30	18
3	8	14	4
4	15 below 0	16	5
5	15	22	2
6	12	27	5
7	10	14	6
8	12	20	6
9	11	30	8
10	6	35	6
11	0	40	15
12	7	45	37

Kittanning Gazette.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.--NO. 11.

PHILADELPHIA, MARCH 14, 1835.

No. 375.

## AN HISTORICAL SKETCH OF EPHRATA;

Together with a concise account of the Seventh-Day Baptist Society of Pennsylvania. (Written for the Portraiture of Pennsylvania, and communicated in a letter to Thomas F. Gordon, Esq.—By him furnished for the Register.

By WILLIAM M. FARNSTOCK, M. D.

Ephrata is one of the earliest settlements of the interior of this State, and is the first Protestant Monastery established in America. Its history is interesting on account of the peculiarity of the Institution, and the associations connected with it. It is situated in Cocalico township, Lancaster county, at the intersection of the Reading road with the Downingtown or Harrisburg turnpike, sixty miles N. W. of Philadelphia, thirteen N. E. from Lancaster, and thirty-eight from Harrisburg. This name is now applied to the neighborhood of *Ephrata proper*, for the distance of a mile along the turnpike, making Cocalico creek the centre. Thus considered, it contains about twenty dwellings, several stores, two taverns, and a paper mill. *New Ephrata* is a smaller village about a mile further west, on the turnpike.

Ephrata, proper, is an irregular *enclosed* village, lying in a triangle formed by the turnpike, the upper, or old Reading road, and the Cocalico creek, and belongs entirely to the Seventh Day Baptist Society. It contains a Monastery and several other buildings for the accommodation of the Society; to which is attached and belonging to the same, about one hundred and forty acres of land, and a grist mill and saw mill. The Post office which bears this name, is an half mile from the original village. Ephrata, in former times, was known better among the German population, by the name of *Kloster*, (Cloister) or *Dunkertown*—a nickname, from the word Dunker or Tunker, corruptions of *Taufer*, Baptist. The Society of Ephrata, however, are a distinct sect from the denomination that now bears the name of *Dunkers*, with whom they have always been confounded. Originally they descended from that division of Christians. About the year 1694, a controversy arose in the protestant churches of Germany and Holland, in which vigorous attempts were made to reform some of the errors of the church, and with the design of promoting a more practical, vital religion. This party, at the head of which was the pious SPENER, ecclesiastical superintendent of the Court of Saxony, was opposed, violently, and after having bestowed upon them, in ridicule, the epithet of *Pietists*, they were suppressed in their public ministrations and lectures, by the Consistory of Wittenberg. Notwithstanding they were prohibited from promulgating, publicly, their views and principles, it led to inquiry among the people. This state of things continuing, many learned men of the different Universities left Europe, and emigrated to America, whilst others remained and persevered in the prosecution of the work they had commenced with so much diligence. In the year 1708, ALEXANDER MACK, of Schriesheim, and seven others in Schwarzenau, Germany, met together, regularly, to examine, carefully and impartially, the doctrines of the New Testament, and to ascertain, what are the obligations it imposes on professing Christians;

determining to lay aside all preconceived opinions and traditional observances. The result of their inquiries terminated in the formation of the Society now called the Dunkers, or First Day German Baptists. Meeting with much persecution as they grew into some importance, as all did who had independence enough to differ from the popular church, some were driven into Holland, some to Creyfels in the Duchy of Cleves, and the mother church voluntarily removed to Serustervin, in Frizland; and from thence emigrated to America in 1719, and dispersed to different parts—to Germantown, Skippeck, Oley, Conestoga, and elsewhere. They formed a church at Germantown in 1723, under the charge of PETER BECKER. The church grew rapidly in this country, receiving members from the banks of the Wissahickon and from Lancaster county; and soon after a church was established at *Muehlbach*, (Mill creek) in this county. Of this community was one CONRAD BEISSEL, a native of Germany. He had been a Presbyterian, and fled from the persecutions of that period. Wholly intent upon seeking out the true obligations of the word of God, and the proper observance of the rites and ceremonies it imposes, stripped of human authority, he conceived that there was an error among the Dunkers, in the observance of the day for the Sabbath—that the *Seventh day* was the command of the LORD God, and that *that day* being established and sanctified, by the GREAT JEHOVAH, forever! and no change, nor authority for change ever having been announced to man, by any power sufficient to set aside the solemn decree of the ALMIGHTY—a decree which he declared that he had sanctified forever!—he felt it to be his duty to contend for the observance of that day. About the year 1725, he published a tract entering into a discussion of this point, which created some excitement and disturbance in the Society at Mill creek; upon which he retired from the settlement, and went, secretly, to a cell on the banks of the Cocalico, which had previously been occupied by one ELMELICH, an hermit. His place of retirement was unknown for a long time to the people he had left, and when discovered, many of the Society at Mill creek, who had become convinced of the truth of his proposition for the observance of the Sabbath, settled around him, in solitary cottages. They adopted the original Sabbath—the *Seventh day*—for public worship, in the year 1728; which has ever since been observed by their descendants, even unto the present day.

In the year 1732, the solitary life was changed into a conventicle one, and a Monastic Society was established as soon as the first buildings erected for that purpose were finished—May 1733. The habit of the Capuchins, or White Friars, was adopted by both the brethren and sisters; which consisted of a shirt, trousers, and vest, with a long white gown and cowl, of woollen web in winter, and linen in summer.—That of the sisters differed only in the substitution of petticoats for trousers, and some little peculiarity in the shape of the cowl. Monastic names were given to all who entered the cloister. ONESTUS (Israel Eckerlin) was constituted *Prior*, who was succeeded by JAEZEE, (Peter Miller); and the title of *Father*—spiritual father—was bestowed by the Society, upon BEISSEL, whose monastic name was FRIEDSAM; to which the brethren afterwards

added, *GOTTRICHT*—implying, together, *Peaceable, God-right*. In the year 1740, there were thirty-six single brethren in the cloister, and thirty-five sisters; and at one time, the Society, including the members living in the neighborhood, numbered nearly three hundred.

The first buildings of the Society, of any consequence, were *Kedar*, and *Zion*—a meeting house and convent, which were erected on the hill called Mount Zion. They afterwards built larger accommodations, in the meadow below, comprising a Sister's House called *Saron*, to which is attached a large *Chapel*, and "*Saal*," for the purpose of holding the *Agopos* or *Love Feasts*.—A Brother's House, called *Bethania*, with which is connected the large *meeting room*, with galleries, in which the whole Society assembled, for public worship, in the days of their prosperity, and which are still standing, surrounded by smaller buildings, which were occupied as printing office, bake house, school house, almonry, and others for different purposes; on one of which, a one story house, the town clock is erected.

The buildings are singular, and of very ancient architecture—all the outside walls being covered with shingles. The two houses for the brethren and sisters, are very large, being three and four stories high: each has a *chapel* for their night meetings, and the main buildings are divided into small apartments, (each containing between fifty and sixty,) so that six dormitories, which are barely large enough to contain a cot, (in early days a bench and billet of wood for the head,) a closet and an hour-glass surround a common room, in which each sub-division pursued their respective avocations. On entering these silent cells and traversing the long narrow passages, visitors can scarcely divest themselves of the feeling of walking the tortuous windings of some old castle, and breathing in the hidden recesses of romance. The ceilings have an elevation of but seven feet; the passages leading to the cells, or "*Kammers*," as they are styled, and through the different parts of both convents, are barely wide enough to admit one person, for when meeting a second, one has always to retreat;—the dens of the *Kammers* are but *five feet* high, and twenty inches wide, and the window, for each has but one, is only eighteen by twenty-four inches; the largest windows affording light to the meeting rooms, are but thirty by thirty-four inches.—The walls of all the rooms, including the meeting room, the chapels, the saals, and even the *kammers*, or dormitories, are hung and nearly covered, with large sheets of elegant penmanship, or ink-paintings,—many of which are texts from the scriptures, done in very handsome manner, in ornamented gothic letters, called in the German *Fractur-schriften*. They are done on large sheets of paper manufactured for the purpose at their own mill, some of which are put into frames, and which admonish the resident, as well as the casual visitor, which ever way they may turn the head. There are some very curious ones: two of which still remain in the chapel attached to *Saron*. One represents the narrow and crooked way, done on a sheet of about three feet square, which it would be difficult to describe—it is very curious and ingenious: the whole of the road is filled up with texts of scripture, advertising the disciples of their duties, and the obligations their profession imposes upon them. Another represents the three heavens. In the first, *CHRIST*, the Shepherd, is represented gathering his flock together; in the second, which occupies one foot in height, and is three feet wide, three hundred figures, in the *Copuchin dress*, can be counted, with harps in their hands, and the heads of an innumerable host; and in the third is seen the throne surrounded by two hundred arch-angels. Many of these *Fractur-schriften* express their own enthusiastic sentiments on the subject of *celibacy*, and the virtue of a recluse life, whilst others are devotional pieces. The following are taken from two found in the chapel of the Sisters' convent: I can copy

the sentiment but cannot convey an idea of their style:—

Die Lieb ist unsre Kron und heller Tugend Spiegel,  
Die Weissheit unsre Lust, und reines Gottes Sigel;  
Das Lamm ist unser Schatz wir uns anvertrauen,  
Und folgen seinem Gang als reinste Jungfrauen.

Unsre Kronen die wir tragen in dieser Sterblichkeit,  
Werden uns in Truetsals-tagen durch vil Leide zubereit,  
Da muss unsre Hoffnung bluchen und der Glaube wachsen auf,  
Wan sich Welt und Fleisch bemuehen uns zu schwache in dem Lauf,  
O Wol dan! weil wir gezaehlet zu der reinen Laemmur Heerd,  
Die dem keuschen Lam vermachlet, und erkauffet von der Erd,  
Bleibet schon allhir verbergen, unser Ehren Schmuck und Kron,  
Wird uns doch an jenen Morgen kroenen, Jesus, Gottes Sohn.

In the rooms which any sister has occupied, and is departed, a piece, which is framed in imitation of a tablet, is put up, expressive of the character and virtues of the deceased, or some feeling memorial of love is inscribed. The following is one I found in the *Kammer*, which had been occupied by *ZENOBIA*—a very beautiful, lovely, and devout sister:—

#### Z E N O B I A :

Wird Gruenen und Gedeyen, ihr Arbeit wird nicht vergehlich,  
nach auch ihre Hoffnung verlohren seyn, ihr Erbe bluchen mitten unter den Heiligen.

A room was set apart for such purposes, called the *writing room*, and several sisters devoted their whole attention to this labor, as well as to transcribing the writings of the Founder of the Society; thus multiplying copies for the wants of the community, before they had a printing press. Two sisters named *ANNASTASIA*, and *IRISGENIA*, were the principal ornamental writers. They left a large folio volume of *sample alphabets*, of various sizes and style; which are both elegant and curious, exhibiting the most patient application. The letters of the first alphabet are twelve inches long, surrounded by a deep border, in imitation of copper plate engraving—each one of which is different in the filling up. It was finished in the year 1750, and is still preserved in the hands of the trustees. There was another transcribing room appropriated exclusively to copying music:—hundreds of volumes, each containing five or six hundred pieces, were transferred from book to book, with as much accuracy, and almost as much neatness as if done with a graver.

It was in contemplation, at one time, by the *ECKENLERS*, three brothers, one of whom was *Prior*, and had the superintendence of the secular concerns, to make it a place of more importance than a mere religious refuge. They were from Germany, and had been brought up Catholics. They conceived a project of erecting extensive buildings, and connecting trade with it; and had some preparations under way—the timber all hewn, as all the buildings are of wood, even the chimneys which remain in use at this day,—and in readiness to erect a *tower*, and had sent to Europe, where they had extensive connections, and got a chime of bells cast, unknown to the Society, until they arrived at Philadelphia, and the bill for payment was forwarded to them. The Society resolved not to receive them, but had them sold and paid the loss. One of these bells having upon it, *EPHATA*—*ISRAEL ECKENLIS, PRIOR*, was purchased, and is now on one of the churches in

Lancaster. This transaction led to the discovery of a conspiracy of the **ECKERSLINS** to possess themselves of the title of the property, which was much more extensive and valuable than now, and which terminated in his expulsion (Israel) from the office of Prior. They afterwards removed to Virginia, where they obtained some notoriety in connection with the Indian affairs.—The Society was wedded to Apostolic simplicity,—they desired no *tower*—no *bells*. They refused to have a bell to call them to meeting, even the midnight meeting, which was regularly held at twelve o'clock: **FRIEDMAN** contending that the spirit of devotion ought to be sufficient to make them punctual to the hour, which generally proved to be adequate.

The community was a republic, in which all stood upon perfect equality and freedom. No monastic *rules* were taken, neither had they any written covenant, as is common in the Baptist churches. The New Testament was their confession of faith, their code of laws, and their church discipline. The property which belonged to the Society, by donation, and the labor of the single brethren and sisters, was common stock, but none were obliged to throw in their own property or give up any of their possessions. The Society was supported by the income of the farm, grist mill, paper mill, oil mill, fulling mill, and the labor of the brethren and sisters in the Cloister.

This Society has been much misrepresented by writers who know but little of them, and mostly draw on their imaginations and the libels of the persecutors of the Society, for the principles of this people. In a short notice of Ephrata in *Gordon's Gazetteer of Pennsylvania*, drawn from an account published by one not very friendly to the Society, in the *Transactions of the Historical Society of Pennsylvania*, several errors were inadvertently and unconsciously, promulgated by the respected author.\* The good and devout Founder is represented as a crafty, designing usurper of ecclesiastical authority, and as assuming titles, honors, and power. This is not the place to enter into a full refutation of these charges, which are without foundation, and could only have originated in gross ignorance, or shameful wickedness. **BEISSEL**, who had been educated in the Calvinistic faith, left Europe that he might enjoy freedom of opinion in America; he withdrew from the Society of Dunkers at Mill creek, because his views on the Sabbath produced some dissension, and after he was drawn from his seclusion, *by love* for those who came and settled around him, and entreated his ministry, he devoted his whole life and property to advance the welfare of the Society; giving the management of the secular affairs entirely into the hands of others, while he gave his attention wholly to instructing them in the Word of Life, and establishing the Gospel in its truth and simplicity. The title of "**FATHER**," and "**GOTTRECHT**," were conferred upon him by his brethren, and was not a presumptuous assumption of **BEISSEL**. Their principles are equally misrepresented in that as well as most other English accounts of the Society. In *Buck's Theological Dictionary*, we are told that "the principal tenets appear to be these: that future happiness is only attained by penance and outward mortification in this life; and that as **JESUS CHRIST**, by his meritorious sufferings became the Redeemer of mankind in general, so each individual of the human race by a life of abstinence and restraint, may work out his own salvation. Nay, they go so far as to admit of works of supererogation, and declare that a man may do much more than he is in justice or equity obliged to do, and that his superabundant works may therefore be applied to the salvation of others;" and a great many other things equally ridiculous and unfounded. The account in that book is a tissue of misrepresentation, unworthy a place in a work of that character.

The principles of the Seventh Day Baptist Society of Ephrata, which no writer that we have encountered,

seems to understand, though they have been published in the German language, with full explanations and commentaries, seventy or eighty years ago, may be summed up in a few words, viz:

1. They receive the Bible as the only rule of Faith, covenant, and code of laws for church government.—They do not admit the least license with the letter and spirit of the scriptures, and especially the New Testament,—do not allow one jot or tittle to be added or rejected in the administration of the ordinances, but practice them precisely as they are instituted and made an example by **JESUS CHRIST** in his Word.

2. They believe in the Divinity of our Lord **JESUS CHRIST**, and the trinity of the Godhead; having unfurled this distinctive banner on the first page of a hymn book which they had printed for the Society as early as 1739, viz: "*There are three that bear record in heaven, the Father, the Word, and the Holy Ghost: and these three are one. And there are three that bear witness in earth, the Spirit, and the water, and the blood; and these three agree in one.*"

3. They believe that salvation is of Grace, and not of works; and they rely solely on the merits and atonement of Christ. They believe, also, that that atonement is sufficient for every creature—that Christ died for all who will call upon his name, and offer fruits meet for repentance; and that all who come unto Christ are drawn of the Father.

4. They contend for the observance of the original Sabbath, believing that it requires an authority equal to the Great Institutor, to change any of his decrees.—They maintain that as he *blessed and sanctified* that day *forever*, which has never been abrogated in his Word, nor any scripture to be found to warrant that construction, that it is still as binding as it was when it was announced amid the thunders of Mount Sinai. To alter so positive and *hallowed a commandment* of the **ALMIGHTY**, they consider would require an explicit edict from the **GREAT JESHOVAH**. It was not foretold by any of the Prophets, that with the New Dispensation there would be any change in the Sabbath, or any of the commandments. Christ who declared himself the Lord of the Sabbath, observed the Seventh day, and made it the day of his especial ministrations; nor did he authorise any change. The Apostles have not assumed to do away the original Sabbath, or give any command to substitute the first for the Seventh day. The circumstance of the disciples meeting together to break bread on the first day, which is sometimes used as a pretext for observing that day, is simply what the Seventh day people do at this day. The sacrament was not administered by Christ, nor by the Apostles on the Sabbath, but on the first day, counting as the people of Ephrata still do, the evening and the morning to make the day.

5. They hold to the Apostolic Baptism—believers baptism—and administer trine immersion, with the laying on of hands and prayer, while the recipient yet remains kneeling in the water.

6. They celebrate the Lord's supper at night, in imitation of our Saviour;—washing at the same time each others feet, agreeably to his command and example, as is expressly stated in the 13th chapter of the evangelist John, 14th and 15th verses. This is attended to on the the evening after the close of the Sabbath—the Sabbath terminating at sunset of the Seventh day, thus making the supper an imitation of that instituted by Christ, and resembling also the meeting of the Apostles on the first day to break bread, which has produced much confusion in some minds in regard to the proper day to be observed.

Celibacy they consider a virtue, but never require it, nor do they take any vows in reference to it. They never prohibited marriage and lawful intercourse, between the sexes, as is stated by some writers, but when two concluded to be joined in wedlock, they were aided by the Society. It (celibacy) was urged as being more conducive to a holy life, for **Paul** saith: "*Th*

[\* See Reg. Vol. V. page 331.—ED.]

*What are after the flesh, do mind the things of the flesh: but they that are after the Spirit, the things of the Spirit.*—And again: *He that is unmarried, careth for the things that belong to the Lord, how he may please the Lord; But he that is married careth for the things of the world, how he may please his wife. There is this difference between a wife and a virgin. The unmarried women careth for the things of the Lord, that she may be holy, both in body and in spirit: but she that is married careth for the things of the world, how she may please her husband.—I say therefore to the unmarried and widows, it is good for they abide even as I."* And they also consider that those who sacrifice the lusts of the flesh, and live pure virgins for CHRIST'S sake, will be better fitted, and will enjoy the first places in glory. ST. JOHN, in the Revelations, says: *"I looked up, and lo, a Lamb stood on Mount Zion, and with him an hundred and forty and four thousand, having his Father's name written in their foreheads. And I heard a voice from heaven, as the voice of many waters, and as the voice of a great thunder: and I heard the voice of harpers harping with their harps. And they sung as it were a new song before the throne, and before the four beasts, and the elders: and no man could learn that song but the hundred and forty and four thousand, which were redeemed from the earth. These are they which were not defiled with women; for they are virgins. These are they which follow the Lamb whithersoever he goeth. These were redeemed from among men, being the first fruits unto God and unto the Lamb."* This was a fond, cherished subject, and was constantly inculcated. It may be considered the ground of the Institution at Ephrata, whose prosperity and advancement was dependent on it being properly appreciated. It was sedulously kept before them, by their ministers, in its brightest colours; and all the scripture, which is not a little, was brought to bear upon it, to inspire them with perseverance and faithfulness. It promised capabilities which others could not possess in the divine life, and also held out the brighter rewards of Heaven. It was a prolific subject for many of their hymns, which seemed to hallow and sanctify virginity. I have seen one, an occasional hymn, for they multiplied new hymns for every particular meeting or celebration—one which is very beautiful indeed, and which was a prophecy respecting Ephrata—a prophecy which has been verified. It invoked in elegant terms, steadfastness of purpose among the brethren and sisters of the Cloister, and laments the downfall, in prospect of any declension, in most affecting strains. The following is a stanza from the hymn above alluded to:

Auch Ephrata, wird hier so lange stehen,  
Als Junfrauen darinn am Reihen gehen;  
Wann aber dieser Adel wird aufrühren,  
So wird die Rache diesen Ort zerstören.

They do not approve of paying their ministers a salary. They think that the Gospel was sent without money and without price, and that every one called to preach the word, should do it from the love of the cause, and in this matter to follow the advice and example of PAUL. However, they never had any scruples in affording their ministers such supplies of life as they possess themselves, and gave them the same support the other brethren enjoyed. Individual members may give, as presents, what to them seemeth fit, in money, goods, &c.; and whenever he travels for religious purposes, if needy, is supplied with money out of the treasury to bear his expenses.

These are the great and leading tenets, and principles of the Seventh day Baptists of Pennsylvania.—There are many other minor points of not sufficient importance to enumerate in detail, and may better be adverted to in replying to some errors which writers have saddled upon them, and which cannot, properly, be considered as tenets and principles, but only as peculiarities. I cannot, here, go into an exposition of the

peculiar views of this people, nor enter into the minutiae of the manner of performing all the ceremonies and ordinances. I would merely remark in regard to their regular worship, that they commence with a hymn, then prayers, (kneeling) and after a second hymn, the minister requests one of the brethren (any one) to read a chapter out of the Scriptures, which they are at liberty to choose from any part of the Bible,—he then expounds the chapter; tracing its bearings and historical connection with the prophets and the New Testament; after which the *Exhorters* enforce the duties it inculcates, and should any member, brother or single sister be able to improve the subject still farther, or have any remarks relative to the topic, to make, is at perfect freedom to express them. Prayer and singing, with the reading of a psalm, instead of a *benediction*, concludes the service. At another time, and in another place, I may enter into a full exposition of the Principles and Ordinances of this society, and exhibit at length their doctrines, and the grounds on which they are predicated.

It is not one of their customs to wear long beards, as is frequently said of them: this is more the case with the Dunkers and Menonists. They are often represented as living on vegetables, the rules of the society forbidding meats, for the purpose of mortifying the natural appetite, and also as lying on wooden benches, with billets of wood for pillows, as an act of penance. The true reason and explanation of this matter is, that both were done from considerations of economy. Their circumstances were very restricted, and their undertaking great. They studied the strictest simplicity and economy in all their arrangements: wooden flags, wooden goblets, turned wooden trays, were used in administering the communion; and the same goblets are still in use, though they have been *presented* with more costly ones. Even the *plates* off of which they ate, were octangular pieces of thin poplar boards, their *forks* and *candlesticks* were of wood, and also every other article that could be made of that material, was used by the whole community. After they were relieved from the pressure of their expensive enterprise in providing such extensive accommodations, they enjoyed the cot for repose, and many other of the good things of life; though temperance in eating and drinking, was scrupulously regarded. And it may be well to remark, that there was not any ardent spirits used in the building of the whole village; the timber of which was hewn, and all the boards sawed by hand during the winter months. The society was a social community, and not a cold, repulsive, bigoted compact; being sometimes represented as reserved and distant, and even not giving an answer when addressed on the road. MORGAN EDWARDS, in his *"Materials towards a History of the American Baptists,"* (published in 1770,) bears a different testimony; he says "From the uncouth dress, the recluse and ascetic life of these people sour aspects and rough manners might be expected; but on the contrary, a smiling innocence and meekness grace their countenances, and a softness of tone and accent adorn their conversation, and make their deportment gentle and obliging. Their singing is charming; partly owing to the pleasantness of their voices, the variety of parts they carry on together, and the devout manner of performance." And of BEISSER he gives the following character, which he says he had from one who knew him well. "He was very strict in his morals, and practiced self-denial to an uncommon degree. Enthusiastic and whimsical he certainly was, but an apparent devoutness and sincerity ran through all his oddities. He was not an adept in any of the liberal arts and sciences except music; in which he excelled. He composed and set to music (in three, four, six, and eight parts) a folio volume of hymns, and another of anthems. He published a dissertation on the fall of man, in the mysterious strain; also a volume of letters. He left behind him several books in manuscript, curiously



written and embellished." One writer has made a remark as invidious as it is unfounded on the sisterhood in stating that, "the sisters it would seem, took little delight in their state of single blessedness, and two only (aged and ill favored ones, we may suppose) continued steadfast in renunciation of marriages." They never had to renounce matrimony on entering the Convent, and but four or five of the whole number that have been in the cloister, in the period of one hundred and three years, left and were married. One of these married a gentleman in the city of Philadelphia, and afterwards much regretted her change, as did all others who left the "*stillen einsamkeit*." The rest continued steadfast in their state of single blessedness, and now, save those remaining in the Convent, lie beside each other in the beautiful cemetery in the foreground of the village.

These little things would not be considered worthy of any notice but from fresh currency which has been given to them by a late popular work, which is extensively circulated throughout the state. We conclude our notice of the gratuitous aspersions, by a few words in reply to the charge of their denying the doctrine of original sin, and the eternity of punishment. They do not hold that ADAM's fall condemns indiscriminately all born souls, for many are born and die without sinning; but they admit and teach, that in the fall of ADAM all disposition to good and holiness was lost, and that the whole race inherit a natural innate depravity, which will lead them to sin, and prove their sure condemnation, unless they repent, and are born again of the Holy Spirit. BEISSER wrote a book on this subject, which is as curious as it is ingenious. He enters into long disquisitions on the nature of ADAM and his capabilities, before the fall; explaining many things of the fall, and with it elucidating several parts of the scriptures, which have, and would easily escape the attention of men of less profundity of genius. His views are somewhat mysterious, yet deep and ingenious, but in the present day would be deemed little more than refined speculations sublimated into visions. But none go to deny the depravity of the human heart, and the sad consequences which the fall of Adam has entailed on every succeeding generation, unless each creature be regenerated and born again through the sanctifying influence of the Holy Spirit. They do not believe in universal salvation in the usual acceptance of that term—they teach the sure reward of submission and obedience to the requisitions of the LORD, through the mercy of God in CHRIST JESUS; and believe fully in the punishment of transgression—for *the wages of sin is death*—death to the joys of heaven, and an exclusion from the presence of the LORD—*Cast into utter darkness, where there is weeping and wailing and gnashing of teeth—where the fire is never quenched—where the worm never dieth*. The idea of a universal restoration, did exist among some in the early days, and is to be attributed to attempts to explain the fifteenth chapter of the first epistle to the Corinthians, and the twentieth chapter of the Revelations, and reconcile some other parts of the Scriptures. It, however, is never taught as a doctrine, but is always approached with the greatest caution and delicacy, by their pastor in private conversations with the members, who desire to be instructed upon this subject; and who invariably admonishes them to be diligent in making their calling and election sure—to be prepared for the first resurrection and not to depend on a second.

Though they considered contention with arms and at law unchristian and unbecoming professions, yet they were decided whigs in the Revolution, and have, unfortunately, had to defend themselves too frequently in courts of justice. To set an example of forbearance and Christian meekness they suffered for a long time to be wronged and plundered until forbearance was no longer a virtue. In the French war (the war of 1756)

the doors of the Cloister, including the chapels, meeting room, and every other building were opened as a refuge for the inhabitants of Tulpehocken and Paxton settlements, then the frontiers, from the incursions of the hostile Indians all of whom were received and kept by the society during the period of alarm and danger. Upon hearing of which a company of infantry was dispatched by the Royal government from Philadelphia to protect Ephrata; and on representation of the character of the society, by the commissioners who were sent to visit the places; the Government made them a present of a pair of very large glass communion goblets, which was the only recompense they would receive. At an earlier period they attracted the attention of the Penn family, and one of the young ladies, in England, commenced a correspondence with the society. Governor Penn visited them frequently, and desirous of giving them a solid evidence of his regard, had a tract of *Five thousand acres* of land surrounding Ephrata surveyed and conveyed to them, as the Seventh Day Baptist Manor; but they refused to accept it—believing that large possessions were calculated to engender strife, and it more becoming to christian pilgrims and sojourners not to be absorbed in the gains of this world and the accumulation of property. After the battle of Brandywine the whole establishment was opened to receive the wounded Americans, great numbers of whom were brought here in wagons, a distance of more than forty miles; and one hundred and fifty of whom died, and are buried on Mount Zion. Their doors were ever open to the weary traveller, and all visitors were cordially received and entertained, while they tarried, as is done in the *Hospices* of Europe. All supplies were given to the needy, even their own beds, and to stripping their own backs to afford some shelter from the "*peltings of the pitiless storm*," to those who were exposed to the weather in inclement seasons.

Many of the brethren being men of education, they established, at a very early period, a school, which soon gained for itself an honorable reputation, many young men from Philadelphia and Baltimore being sent here to be educated. A *Sabbath School* was also instituted for religious instruction, which flourished many years, and was attended with some remarkable consequences. It produced an anxious inquiry among the juvenile population, who attended the school, which increased and grew into what is now termed a *revival of religion*. The scholars of the Sabbath school met together every day before and after common school hours, to pray and exhort one another, under the superintendence of one of the brethren. The excitement run into excess, and betrayed a zeal not according to knowledge; which induced FRIENDSAM to discourage an enterprise, which had been commenced, and was partly under way, namely, to erect a house for their especial use, to be called *Succoth*. LUNWINE HACKER, or Brother Obed as he was designated, who was the teacher of the common school, projected the plan of holding a school in the afternoons of the Sabbath, and who in connection with some of the other brethren commenced it, to give instruction to the indigent children who were kept from regular school by employments which their necessities obliged them to be engaged at during the week, as well as to give religious instruction to those of better circumstances. It is not known in what year, exactly, that the Sabbath school was commenced.—Hacker came to Ephrata in the year 1759, and it is presumed that he began soon after he took up his residence amongst them. The materials for the building were furnished, as is recorded in the minutes of the Society, in the year 1749. After the battle of Brandywine, the Sabbath School room, with others, was given up for a hospital, which was occupied as such sometimes; and the school was never afterwards resumed.—Hacker at that period was sixty years of age.

By this time (1777) the society began to decline,

not from causes alleged by some writers—want of vigor of mind in the successor of BEISSEL, who died 1768, for his successor, PETER MILLER, was a man of much greater powers of mind, and had the management of the establishment during BEISSEL's time; and to whose energy and perseverance is mainly attributable the great prosperity of the institution in its early days. The institution was one of the seventeenth century, and in accordance with European feelings: most of the members being natives of Germany. The state of public opinion at BEISSEL's death was widely different from what it was during the first fifty years after it was established, in relation to politics and government, and with this march of intellect different sentiments were entertained in regard to religious institutions. It was commenced as a social community in the midst of a wilderness—the hand of improvement made the desert bloom as the rose, and at *that time* (1768) were surrounded by a dense population. These circumstances connected with incessant persecution—the turmoil and contention into which they were thrown and constantly kept by some of their envious neighbors, were the principal causes of its decline; which continued in the wane until within a few years, since which it is reviving and growing in numbers.

At an early period they established a printing office, one of the first German presses in the State, (the second I believe;) which enabled them to distribute tracts and hymns, and afterwards to print several large works, in which the views of the founder are fully explained. Many of these books have been lost and destroyed. In the revolutionary war, just before the battle of Germantown, three wagon loads of books, in *sheets*, were seized and taken away for *cartridges*. They came to the paper mill to get paper, and not finding any there, they pressed the books in sheets. We find the following, all original works, viz: *Ursatzenliche und Erfahrungs-volle Hohe Zeugnuess Wie man zum Geistlichen Leben und dessen Vollkommenheit gelangen magte*, &c. &c. 1745, pp. 58 quarto—And in the same volume. *Mystische und Erfahrungs-volle Episteln*, &c. &c. (containing seventy-three *Theosophische Episteln*;) 1745 pp. 294 quarto;—*Das Geseng der einsamen und verlassen Turtel Taube Nemlich der Christlichen Kirche*, &c. &c. Von eimen FRIEDSAM und nach der stillen Ewigkeit wullenden Pilger, &c. 1747 pp. 500 quarto;—*Neu vermehrtes Geseng der einsamen Turtel Taube* 1762, pp. 330 duod. (This is a continuation of the preceding book and has the initials of each writer to the hymns. I have not been able to find but one copy of this book and believe it to be the only one extant;—*Erster Theil der Theosophischen Lectionen, Betreffende die Schulen des einsamen Lebens* 1552 pp. 433 quarto. *Paradisches Wunderspiel* &c. &c. 1766 pp. 472 large quarto. (This is another volume of hymns by BEISSEL, and the brethren and the sisters of the society. Four hundred and forty-one were written by BEISSEL; seventy-three by the brethren in the Cloister, one of which contains 215 verses; one hundred by the single sisters, one of which contains 250 verses; and one hundred and twelve by the out door members;—*Delicia Ephratenses, Pars 1. Geistliche Reden*, 1773, pp. 340 quarto; (for which a frontispiece was engraved on copper, impressions of which have also been pasted on the title pages of many others, and the same is cut in wood or type metal, and imprinted in the later works. It is a circle of about three inches in diameter, and contains an altar in the foreground, on which is placed a nest of young birds reaching up their little necks, with open bills, and extending their short pinions to receive a dove returning to them, with an olive branch; at the right is an humble cottage, and at a distance on the left is a castle, with mountains in the horizon. On the front of the altar is the following motto: "*Non omnibus simul*;" with this legend round the margin: *Invenit Hirundo nidum Jehova altaria tua;*" and below the altar: "*Delecta Ephratenses*;)—*Chronicon Ephratense, Enthaltend den*

*Lebens-Lauf des ehrwuerdigen Vaters in Christo FRIEDSAM GOTTRECHT*, &c. &c. *Zusamen getragen von Br. LAMBER und AGRIPPA*, 1786 pp. 250 large quarto.

Music was much cultivated; BEISSEL was a first rate musician and composer. In composing sacred music he took his style from the music of nature, and the whole comprising several large volumes are founded on the tones of the *Æolian* harp—the singing is the *Æolian* harp harmonized. It is very peculiar in its style and concords, and in its execution. The tones issuing from the choir imitate very soft instrumental music; conveying a softness and devotion almost superhuman to the auditor. Their music is set in four, six, and eight parts. All the parts save the bass are lead and sung exclusively by females, the men being confined to the bass, which is set in two parts, the high and low bass—the latter resembling the deep tones of the organ, and the first, in combination with one of the female parts, is an excellent imitation of the concert horn. The whole is sung on the *falsetto* voice, the singers scarcely opening their mouths, or moving their lips, which throws the voice up to the ceiling, which is not high, and the tones, which seem to be more than human, at least so far from common church singing appear to be entering from above, and hovering over the heads of the assembly. Their singing so charmed the Commissioners who were sent to visit the society by the English Government, after the French war, that they requested a copy to be sent to the Royal family in England; which was cheerfully complied with, and which I understand is still preserved in the National Library. About twelve months afterwards a box was received of three or four feet long, and two or two and an half wide, containing a present in return. What the present was is not now certainly known—none having seen it but FRIEDSAM and JAEFZ, who was then Prior, and into whose care it was consigned. It was hurried secretly by him, with the advice of BEISSEL. It is supposed by a hint given by JAEFZ, that it was images of the King and Queen, in full costume, or images of the Saviour on the Cross, and the Virgin Mary; supposing, as many in this country have erroneously thought, that the people of Ephrata possess many of the Catholic principles and feelings. The King, at whose instance they were sent, was a German, and we may presume that he considered that they retained the same views as the monastic institutions of Europe. They have nearly a thousand pieces of music, a piece being composed for every hymn. This music is lost, entirely now, at Ephrata—not the music books, but the style of singing: they never attempt it any more. It is, however, still preserved and finely executed, though in a faint degree, at *Snowhill*, near the Antietam creek, in Franklin county, of this State; where there is a branch of the society, and which is now the principal settlement of the Seventh Day Baptists. They greatly outnumber the people at Ephrata, and are in a very flourishing condition. There they keep up the institution as originally established at Ephrata, and are growing rapidly. Their singing, which is weak in comparison with the old Ephraïm choir, and may be likened to the performance of an overture by a musical box, with its execution by a full orchestra in the opera house, is so peculiar and affecting that when once heard, can never be forgotten. I heard it once at Ephrata, in my very young days, when several of the old choir were still living, and the Antietam choir had met with them. And some years since I sojourned in the neighborhood of Snowhill during the summer season, where I had a fine opportunity of bearing it frequently and judging of its excellence. On each returning Friday evening, the commencement of the Sabbath, I regularly mounted my horse and rode to that place, a distance of three miles, and lingered about the grove in front of the building, during the evening exercises, charmed to enchantment. It was in my gay days, when the fashion and ambition of the world possessed my whole breast, but there was such

a sublimity and devotion in their music, that I repaired with the greatest punctuality to this place, to drink in those mellifluous tones, which transported my spirit for the time, to regions of unalloyed bliss—tones which I never before nor since heard on earth, though I have frequented the English, the French, and the Italian opera—that is music for the ear—the music of BEISSER is music for the soul—music that affords more than natural gratification. It was, always, a delightful hour to me, enhanced by the situation of the cloister, which is in a lonely vale just beyond the South Mountain.—During the week I longed for the return of that evening, and on the succeeding morning was again irresistibly led to take the same ride, (if I did not let it be known in the evening that I was on the ground, for whenever it was discovered, I was invited and kept the night in the cloister)—to attend morning service, at which time I always entered the room, as there was then preaching; but as often as I entered I became ashamed of myself, for scarcely had these strains of celestial melody touched my ear, than I was bathed in tears—unable to suppress them, they continued to cover my face during the service; nor in spite of my mortification could I keep away. They were not tears of penitence, for my heart was not subdued to the Lord, but tears of ecstatic rapture, giving a foretaste of the joys of heaven.

I have spoken of Ephrata as it was, not as it is. True, old Ephrata still stands—its weather-beaten walls, some of which are upwards of an hundred years old, and crumbling to pieces, rendering it more interesting from its antiquity. Many traces of the olden time remain, but its life has departed. There are, however, many delightful associations connected with its mouldering walls, and like some of the dilapidated castles, which are apparently falling to the ground, deserted, and given to the rooks and owls, yet it contains many habitable and comfortable apartments; and there are many who love to linger in its silent rooms, and sensibly feel, while meditating upon the vicissitudes of this ancient institution, the force of the sentiments of VOLXER: “*Je vous salue ruines solitaires! Oui: tandis que votre aspect recouvre d'un secret effroi les regards du vulgaire, mon cœur trouve à vous contempler le charme des sentiments profonds et des hautes pensées.*” There is still a small band who retain the principles, and meet together regularly to worship, on the evening and the morning of the Sabbath; but they are a flock without a shepherd—they have the forms but not the spirit, nor the zeal of their predecessors. The ancient community have been called “*Zealots.*” Zeal is, certainly, better than indifference, and enthusiasm better than deadness. Zeal is the life of Christianity, and it is an honor to a denomination to be designated by a title, even if it be in ridicule, which imports their activity and faithfulness. The people of Ephrata now lack that desirable quality for which those of old are *stigmatized*; for that zeal would be an honor to them should they merit it. Ephrata would be a paradise, as it was in former days, were the people now here, such *zealots* as they have descended from. They now partake more of the cold Christianity of the world. It must not, however, be supposed that they were ranters or made a noise and display of their zeal. It was a quiet, all-absorbing zeal, in which the world and all its vanities were sacrificed to pure and constant devotion—they were living and moving in this world, performing diligently all the duties that devolved upon them here, but their spirits, and all their conversation, was centered in heaven. Of them, who were derided with the epithet of “*Zealots,*” MR. WINCHESTER, speaking of the people of Ephrata, in his *Dialogues*, says: “*I remember the Rev. MORGAN EDWARDS, formerly minister of the Baptist Church in Philadelphia, once said to me: ‘Gon will always have a visible people on earth, and these (the Society of Ephrata) are his people at present, above any other in the world.’*”—MR. WINCHESTER says further:

“*They walk in all the commandments and ordinances of the Lord blameless, both in public and private—They bring up their children, (now speaking of the married members,) in the nurture and admonition of the Lord, no noise, rudeness, shameless mirth, loud laughter, is heard within their doors. The law of kindness is in their mouths; no sourness or moroseness disgraces their religion, and whatsoever they believe their SAVIOUR commands they practice, without inquiring, or regarding what others do. They read much; they sing and pray much; they are constant attendants upon the worship of God; their dwelling houses are all houses of prayer.*”

There are several single sisters remaining in the Convent, (one of whom has been there forty six years, and another lives in a cottage, solitary life, sixty years,) but another government now exists. In former days the whole property and income belonged exclusively to the single brethren and sisters, but now, by a charter obtained from the state Legislature, at the instance of the single members then remaining, the property is invested in all the members, single and married. Since then the sisters in the Convent are not supported out of the common stock and their common labour, but each has house room, which all the married members are entitled to, who require it, as well as fire wood, flour, and milk, from the society, who still possess the farm, 140 acres, and a grist mill, and a saw mill, and their labor they apply to their own use, or dispose of it as they see proper.

This institution has suffered the fate of similar institutions in the old countries, from the mutations of time and the natural consequences of the advancement of general improvement; and especially from incessant internal opposition and persecution with which it had to contend. Its indomitable persecutors have been removed to the land where the wicked cease from troubling, and the Society is just escaping from heavy embarrassments, which they incurred in defending themselves from the aggressions and impositions of their avaricious neighbors, and who kept them in turmoil and perplexing contention, for a long series of years. It is again looking up, and under the new regulations of the present Charter, is increasing in numbers, and it is to be hoped, still in usefulness. Had they a shepherd to feed them with the bread of life, there is a good prospect of it becoming a renewed and vigorous body, but from their repugnance to support a salaried minister, they have to wait in patience until the Lord, in his good pleasure, raise up one among themselves.

As early as 1758, there was a branch of this Society established at the Bermudian creek, in York county, about 15 miles from the town of York; some of the members of which still remain, though they have been without preaching many years. Another was established in 1763, in Bedford county, which still flourish, and many members of the present Society are scattered through the counties of the interior of the State; so that the truth which was left has not become extinct, but is still extending, which is particularly the case at Snowhill; and hope is still entertained, that *the little one may become a thousand, and the small one a great nation.*

## NEW YORK AND ERIE RAIL ROAD.

### APPENDIX A.

*Report of BENJAMIN WRIGHT, Esq., Civil Engineer, who was appointed by the Governor to survey the route of the New York and Erie Rail Road.*

TO JOHN A. DIX, Esquire,  
Secretary of State:

SIR:—His Excellency the Governor having been pleased to appoint me to execute the survey, and make

an estimate of the expense of a rail road from "at or near the City of New York to Lake Erie" under the act of May 6th 1834, which said act, requires me to file the report, maps, profiles and estimates in the office of the Secretary of State:—

In conformity to said act I now present my report, maps, profiles, &c., to be filed in your office, as the law directs, and beg leave and thereby

#### TO REPORT:

That in undertaking the important responsible duty of surveying the route of a rail way communication from the Hudson river, near the city of New York, to Lake Erie, I deemed it essential to keep in view the great public objects sought to be attained by the proposed work. It was obvious that the road was to be constructed, not only for the accommodation of the inhabitants of the district immediately adjacent to the route, but also in order to furnish the means of a regular, rapid and uninterrupted intercourse, at nearly all seasons of the year, between the city of New York and the extensive and populous communities upon the Western Lakes and waters.

The vast and acknowledged benefits which had been experienced throughout a great part of the State, and especially by its commercial emporium, from the construction of the Erie Canal, as well in the increase of population and wealth, as in the progress of agriculture and trade, the augmented value of lands, and the rapid and unexampled growth and creation of cities, towns, and villages, along the route, had plainly proved that a thoroughfare running through the southern tier of counties, and properly suited to their topographical character could not fail to impart similar advantages to that important and valuable section of the country, while the pressing necessity of establishing a channel of communication within this State which should be open during nearly, or quite the whole of the winter months, and thereby remedy the evils occasioned by its high northern latitude, had not only been felt sensibly by the inhabitants of the metropolis, but had excited public attention throughout a great portion of the fertile and extensive regions upon the upper Lakes, and the valley of the Mississippi.

The long line of counties in our own State, through which the road would pass, favored as they are with a healthful climate and an enterprising population, and abounding in natural resources which the proposed work could not fail to develop, also possessed an additional importance in their peculiar topography, being intersected in numerous directions by important streams, leading into that section of the country from other parts of the state, and thereby furnishing striking facilities for connecting the proposed road with lateral branches, capable of accommodating large masses of our population.

Keeping therefore steadily in mind these general considerations, I deemed it an incumbent duty in selecting the line of location for the proposed road, to obtain a route which as far as should be practicable might combine:

- 1st. Reasonable economy in its construction.
- 2d. Rapidity and regularity of communication for passengers, light merchandise of value, and the public mail.
- 3d. Cheapness of transportation for bulky commodities.
- 4th. Facilities of connection with lateral branches.
- 5th. The general accommodation of the inhabitants, and the development of the resources of the country along the route.

And I considered it also necessary to take into view, not only the present, but the prospective advantages of the route, and to arrange the graduation of the whole work, in reference to such further additions and im-

provements as might hereafter become necessary in order to accommodate a great increase of trade and transportation.

Being guided by these general outlines, I commenced the survey of the route on the 23d of May last, under the appointment which I received from his Excellency the Governor on the 21st of that month.

The work was divided into two grand divisions: of which the *Eastern* extending from the Hudson river to Binghamton, was under the direction of James Seymour, and the *Western* from Binghamton to Lake Erie, was placed under Charles Ellet, jr., both acting as my assistants and subject to my supervision.

Those gentlemen with my advice and approbation, each had sometimes two, and often three and four parties employed in explorations through the season.—From each of them I have received separate reports, with their views of plans and description of country through which each had passed.

I take great pleasure in stating, that the surveys thus committed to their care, have been executed to my entire satisfaction, and I refer to their reports and estimates of quantities, as exhibiting the industry and skill with which their duties have been discharged.

I have personally inspected the lines surveyed nearly their whole length, and have particularly considered and examined every part of the route, at which there could be any reasonable doubt or difficulty, and we have fully advised and compared opinions, as to all prices estimated for the graduation of the work.

It is possible, and I may say probable, that the shortness of time allowed for the completion of so long a line of survey, in some instances not noticed by me, may have prevented our ascertaining the very best and cheapest route, of which some portions of the country may have been capable; but I have become perfectly satisfied from the lines already run, and minutely measured, that a feasible route has been obtained, free from formidable difficulties, and capable of being completed with economy and despatch.

A more minute and careful exploration over some particular parts of the country, will enable the engineer to adopt very considerable alterations and improvements at many points, both as to graduation, and also the cost of the work.

The great object of securing rapidity and regularity of communication between the city of New York and the Lake, being one of paramount importance, I have studiously sought to avoid the use of stationary steam power on inclined planes, as being productive of delay, danger, expense and difficulty; and in this respect, have been so successful, that, with the exception of one single plane near Lake Erie, I have brought the whole line within the power of Locomotive Engines, drawing passenger cars, light merchandise, and the public mail.

The steepest acclivity encountered on the whole line, with the exception beforementioned, will be only one hundred feet per mile; and having been furnished with satisfactory evidence that by recent improvements in the locomotive steam engines, on the Baltimore and Ohio rail road, they have been enabled to ascend an acclivity of one hundred and seventy-six feet to the mile, drawing between five and ten tons weight, I rely upon that fact in stating, that locomotive steam engines may be advantageously used on the whole of the proposed route, from the Hudson river to the head of the plane near Lake Erie: that they will be able to pass its steepest grades, drawing at least 70 or 80 passengers, with their baggage; while upon at least nine tenths of

the whole route, they will be able to propel very great burthens at a great rate of speed.

In order, however, to obtain these easy grades of acclivity, I have been compelled to pursue, by a serpentine line, the valleys of streams, and thereby to lengthen very considerably, the linear extent of the route.

The general face of the country is undulating, and marked by bold and prominent features; but nevertheless, it is intersected by numerous rivers and their branches, which have a gentle descent, and fortunately pursue the general direction necessary for the route, in much of the distance.

It is this all important and cardinal feature in the topography of the country, and the facilities which the valleys of those streams thus present, for obtaining gentle ascents and descents, and moderate graduation, which will explain the reason why I have been able to find a cheap and easy route, without the aid of stationary steam power, through portions of the state which, to the eye of the passing traveller, crossing, as he does, the numerous hills which are traversed by the ordinary stage roads, would seem to present insuperable obstacles to the accomplishment of the proposed work.

An examination of the plans and profiles returned with this report, will show that the route instead of passing directly over, goes around the hills; and that it has not been necessary to surmount any considerable acclivities, except in three or four instances, in which the line crosses the natural boundaries of the great valleys into which the route is topographically divided.

It is true, that the departure from a straight line thus occasioned by following the winding of the water courses, has considerably lengthened the whole route between New York and Lake Erie—But when it is considered that great rapidity of transportation, and cheapness of construction have been thereby secured, and a greater portion of country accommodated; that the conformation of the country wholly forbade the adoption of any other route, more direct, without enormous expense; and that the circuitry of route will be comparatively less than that of the Pennsylvania canals, its deviation from a direct line will not be regarded as a formidable obstacle or objection.

The natural boundaries of the valleys, which are pursued by the route, will serve to subdivide it into six grand divisions, to wit:

The *First or Hudson River Division*, extending seventy-three and a half miles from a point in the Hudson river, twenty-four miles north of the City Hall of New York, to a point in the Deer Park Gap, of the Shawangunk Mountain, dividing the waters flowing into the Hudson from those flowing into the Delaware.

The *Second or Delaware Division*, extending from the point last mentioned through the valley of the Delaware and its tributaries one hundred and fifteen miles, to a summit twelve miles N. W. of the village of Deposit, in Delaware county, dividing the waters of the Delaware from those of the Susquehanna.

The *Third or Susquehanna Division*, extending from the point last mentioned through the valley of the Susquehanna and its tributaries one hundred and sixty-three and a half miles, to a summit thirteen miles S. W. of the village of Hornellsville, in the county of Steuben, dividing the waters of the Susquehanna from those of the Genesee.

The *Fourth or Genesee Division*, extending from the point last mentioned across the valley of the Genesee thirty-seven miles, to a summit three miles E. of the village of Cuba, in Allegheny county.

The *Fifth or Allegheny Division*, extending along the valley of the Allegheny and its tributaries eighty-three miles to the head of the inclined plane, distant

four or five miles from Lake Erie, on a straight line.

The *Sixth or Lake Erie Division*, embracing the short and rapid Descent to the Lake, including the inclined plane and the two branches, one to Portland, nine miles, and one to Dunkirk, eight and a half miles.

It will be perceived by an inspection of the profiles, that the only points where the rates of ascent exceed 60 feet per mile, will be found on the summits above specified, as forming the boundaries of the six Grand Divisions of the route. The acclivities in passing these summits are respectively as follows:

One grade of 100 feet to the mile, in passing from the Hudson River Division, down the west side of the Shawangunk mountain into the Delaware Division.

One of 70 feet, and one of 61 feet to the mile, in passing from the Delaware Division to the Susquehanna Division.

One of 70 feet and one of 65 feet to the mile, in crossing the ridge, between the Susquehanna and its tributary the Chenango River.

And one of 72 feet to the mile, in passing from the Susquehanna Division to the Genesee Division.

I have no doubt that all these ascents and descents above specified, may readily be surmounted by locomotive engines drawing passenger cars, light merchandise and the mail. But in order to aid the passage of burden cars, heavily loaded, it will be necessary to station at the several points above specified, either auxiliary locomotive engines, as is practised on the Liverpool and Manchester rail road, or an increase of animal power, as is used in passing the Parr Ridge on the Baltimore and Ohio road. That this can be effected without any material interruption or inconvenience, will be obvious when it is recollected that the western slope of the Parr Ridge, on the last mentioned road, has an ascent of no less than 253 feet to the mile, an acclivity nearly three times as great as the steepest grade on the proposed route, but that it is nevertheless surmounted at all times by burthen cars heavily loaded, aided only by an increase of animal power.

It will also be borne in mind, that at least three-fourths of the heavy tonnage passing on this road, will descend eastward toward tide water. The elevation of the head of the inclined plane near Lake Erie, being 1303 feet above the Hudson river, the products of the western country passing eastward, will necessarily descend 1303 feet more than they will ascend, and their passage will consequently be aided to that extent by their own gravitation.

It is, however, by no means impossible, that in the course of twenty years the great increase of the population and agricultural products of the interior, and the necessity of expediting their passage to market, may render it expedient and economical to adopt additional tracks with a compound moving power and grades reduced in all cases to 30 feet per mile, with stationary engines, operating on inclined planes, and located at intermediate points along the road. In that event, the entire change might be effected along the whole line, without altering more than thirty or forty miles of the road.

And although I do not believe that this change will ever be made or become necessary, except in the event of so great an increase of trade as to make steady uniform power the best, in which case I believe that stationary power applied on the present grades would be found best, and used as Messrs. Walker and Rastrick proposed on the Liverpool and Manchester road, as *reciprocating power*—I have thought it proper to state how far it would affect the graduation of the road to substitute planes and stationary power, and grades in other places of 30 feet per mile.

The change of plan last mentioned would only apply to burthen cars in any event, as passenger cars would

be liable to less danger, interruption and delay, by using the locomotives or extra animal power to surmount the dividing ridges.

In making the survey and location, I have had lines of exploration made on various parts of the route, in two or three different directions, and more particularly near the Hudson River, where four different routes to several landings were examined, and are all represented on the maps and profiles herewith returned; and if the funds had held out to accomplish some further examinations in Rockland county, and time had permitted, I should have pursued still another line from a point on map No. 1, marked Z, and followed on the northern and eastwardly side of the Hackensack River, in the direction of the dotted line, so as to join the line which runs to the river at Tappan. Such a line ought to be explored before the final location of the Road through Rockland county.

Another part of the line in Orange county ought also to be noticed, as deserving of further examination, which is exhibited on maps Nos. 3 and 4. A strong and ardent desire to accommodate by passing in the immediate vicinity of so important a town as Goshen, and former examinations for a rail road having produced impressions favourable to that route, I had supposed it would prove the best ground, and therefore spent our labours upon it; and it was not until it was too late, that we observed the formation of the country from near Chester through by Florida and the practicability of passing the Wall Kill near Pellet's Island, and joining the present line from six or seven miles west of Wall Kill, that we supposed we could change from the route near Goshen. This route requires an instrumental examination, but unless it prove greatly superior to that by Goshen as now returned, the accommodation of so important a town ought to give it the preference. The routes between the Wall Kill and Shawangunk mountain are exhibited on the map and profiles, and a final location on this part is intimately connected with the suggestion about the Florida route.

It has been proposed to cut upon the top of the Deer-Park Gap, (which is a deep depression of the Shawangunk Mountain,) about 50 feet at the highest point.— This is done in order to reduce the grade upon each side, and particularly on the west side, to 100 feet per mile. The east side can be easily reduced to a grade of 60 feet, for a short distance, and then much less.

I have looked at this point, and given it considerable thought, to determine what ought to be the present plan, in reference to future improvements, when the great increase of business on this road will demand every facility that the nature of the country will permit; and it has brought my mind to the conclusion, that before the lapse of twenty years after the completion of the road, a tunnel will be driven through the mountain, of about three-quarters of a mile in length, whereby its elevation would be so reduced, as to permit a grade of probably 75 to 80 feet, on the west side, and about 30 on the east. As the acclivity of one hundred feet to the mile on the west side of the mountain, is the steepest grade encountered on the road, it has also appeared to me to be well worthy of observation, how far this ascent could be relieved, by the adoption of an inclined plane with a stationary engine, believing, that if it is admissible on any intermediate point in the route, it might be employed at this point, for the relief of the burthen cars, to great advantage. The idea of the tunnel and the stationary engine will, however, be matters of subsequent inquiry, at some future time, and are now referred to, only as parts of an ultimate plan, proper to be borne in mind, in the permanent location of the route.

The line located, then follows from the Shawangunk mountain, by a high embankment across the valley of Bisher's Hill, and then crosses the Delaware and Hudson Canal without difficulty, and soon enters the valley

of the Neversink river, which it follows to the mouth of a branch of this river, called the Sheldrake, and up that to its source: thence crossing the heads of the several branches of the Mongaup, it reaches the head of the Callicoon, (a branch of the Delaware,) which it follows to its junction with the latter river.

An examination of the ground plans will show, that a route has also been surveyed down the Popackton, or eastern branch of the Delaware, and there are also exhibited and marked several other routes through Sullivan County, which have been examined, and regular surveys carried over them, and profiles made of some.

The route passing near Monticello, which is the county town of Sullivan county, would on that account deserve a preference, if the facilities and advantages are nearly equal as to other points, such as grade and cheapness of construction; and although our surveys, as we made them, did not show as favorable a line by Monticello as by the other route, I think a further and more critical examination should be made through this district of country, to find a more favorable route than we have yet seen; and should this be the case, we should, I think, shorten the route some miles, and obtain the advantage of carrying it through a more populous and settled country.

Although the route marked out on the plan as following up the eastern or Popackton branch, and then the Beaver Kill and Willwemach and Little Beaver, has been regularly surveyed, and profiles of it returned, I however consider the route by the Callicoon to be so far preferable that I have not required my assistant to give me quantities on this route, and have not of course estimated it, but it can be done hereafter if necessary or useful.

In carrying the route of the rail road through the heart of Sullivan county, and thereby giving great and permanent advantages to a large district of country, capable of sustaining a considerable population, I will make this passing remark, that by passing down the valley of the Neversink from the foot of the Shawangunk mountain, until I reached the valley of the Delaware river, and then passing up the Delaware to the mouth of the Callicoon, I might have found a route of much easier grade, and which would not average over fifteen feet to the mile. But to that plan there are, in my mind, serious objections. 1st. It would be a more expensive line to grade, on account of its passing along steep side hills, and heavy ledges of rocks, requiring expensive rock excavation. 2d. It would not accommodate or be very useful in Sullivan county, as the country along the bank of the Delaware is not generally favorable to cultivation. 3d. It might come into collision with the Delaware and Hudson Canal, and perhaps divert some of its legitimate and fair business; and in its construction it might interfere with and injure that important and very useful work, for the execution of which, its enterprising proprietors deserve to be gratefully considered.

The line then passes up the Delaware from the Callicoon to the village of Deposit, from which a lateral road may easily be extended into the heart of Delaware county. The route then crosses by a bridge the main or Mohawk branch of the Delaware, and thence follows up the Oquago Creek to its source, on the route towards Bettsburg, from thence it descends to the Susquehanna, and passing that river near Ninevah, follows up the valley of Belden Brook to its source, and then taking the head waters of Page Brook, follows that down the Chenango to Binghamton, or its vicinity.

An examination of the maps and profiles will show, that several routes have been examined between the Delaware river at Deposit and the Chenango at Binghamton, and that lines were run on the most favorable ground, on a nearly direct course between Deposit and Windsor on the Susquehanna, and between Windsor and Binghamton from the Susquehanna to the Chenango.

Both these summits, however, proved to be considerably higher than those on the route chosen; and they cannot be overcome but by stationary steam power.—For a more particular description in detail, of the difficulties to be overcome, I refer to the report of Mr. Seymour, and will only add, that after having attentively examined these routes, I am decidedly of opinion, that the northern route by Betsburg and by Nineveh and Page Brook, ought to be adopted. The route, moreover, will possess a local advantage of peculiar value, in the facilities it will give to various branch rail roads leading into the populous and wealthy sections of the State, along the valleys of the Upper Susquehanna, the Unadilla, and the Onondaga branch of the Chenango, and thus accommodating the counties of Otsego, Chenango, and Courtlandt, and parts of the adjacent counties.

When the line came near the mouth of Page Brook, on the Chenango, it became a question to determine which side of the Chenango we should pass down to near its mouth. A desire to approach near, and even pass into the growing and important village of Binghamton, determined me to have the survey made on the east side, but ascertaining that the Chenango Canal had not then been finally located, I directed a survey on the west side also, and to pass the river near the mouth of Page's brook. This part of the line I do not consider as settled, neither can it be finally determined until the canal is nearly completed; when that shall be done, we can see if there is a fair chance of carrying our rail road on the upper side at a reasonable expense; and should this be the case, a preference ought to be given to the east side of the Chenango, so as to approach near to Binghamton, and pass over the river near the upper part of that village.

From the Chenango river, the route, in following down the Susquehanna Valley for about forty miles, passes through the flourishing village of Owego, where it will become connected with the steamboat line now in preparation for navigating the Susquehanna, and also with the Owego and Ithaca Rail road, which will connect the main line with the important and fertile section of the State adjacent to the Cayuga and Seneca Lakes. After descending for forty miles along the east branch of the Susquehanna, we approach near the Pennsylvania line, north of the Tioga river, (being a large branch of the Susquehanna,) and pass up its valley, by Elmira, Big Flats, and Painted Post, to the forks of the Conhocton and the Canisteo; and then, following up the Canisteo to its source, we pass Hornellsville, Almond, and over the summit between the waters falling into the Susquehanna, and the waters of the Genesee river.

Of nearly 130 miles on the route between the point where we leave the Valley of Page Brook, and near Almond, the grades are all extremely easy and favorable, or can be made so.

From near Almond, in going on westward, we pass the dividing ridge, where, for the present, we have made our grade line 72 feet per mile, but which can be somewhat relieved; and, passing down Dike Creek, we fall into the Valley of the Genesee river, and run down that a few miles, and then up the Valley of Van Campens Brook, through the villages of Friendship and Cuba, until we take the Valley of Oil Creek; then down that to its junction with Ischua Creek, and down the Valley of Olean Creek to the Allegheny river.

Through this district, from the summit between the waters of the Susquehanna and Genesee, and that between the water of Genesee and Allegheny, we have some grades which reach 50 feet per mile, as the line is now run; but it is believed that considerable improvement will be made in this part, on a revision of the line.

Having reached the Valley of the Allegheny, we pass down it about 26 miles, over excellent ground, generally, to the Indian village, near the Cold Spring Creek.

There leaving the Allegheny, we pass up the Valley of the Cold Spring, and over a small swell of land, and descend into the Valley of the Little Conewango, a branch of the Large Conewango; and, passing down that stream, and the Large Conewango, passing the village of Randolph, in Cattaraugus County, and the villages of Waterboro' and Kenedyville, in Chataque County, following down the Valley of the Great Conewango to the Casadaga branch, and up that to its junction with Chataque outlet, we then follow up the Casadaga Valley to Bear Creek, and up that to near Bear Lake. Here we arrive at the dividing point between the waters which run southerly into the Allegheny, and those which run northerly into Lake Erie.

At this point we are only about five miles in a direct line from Lake Erie, and 740 feet above it; and here is a place where we find ground favorable to descend by one plane  $5\frac{1}{6}$  feet in a distance of about one and a half miles; and at the foot of this plane we find ourselves nearly equi distant from Dunkirk and Portland.

At Dunkirk the Government of the United States have expended considerable money in the construction of a harbor, and are preparing to expend more. At Portland there has been no money expended, except by individuals. The Government of the United States have had a regular survey and estimate of the cost to make a harbor. I have obtained plans of each of these places, and return copies of them herewith. It is said that the cost of making a harbor upon the plan reported by Captain Maurice, of Portland, would be \$40,000.

It will be seen by the maps and profiles returned, that a route was surveyed from Randolph, in the County of Cattaraugus, up the Valley of the Great Conewango to its source, and then striking off towards Dunkirk—This route was tried in order to find a more direct and shorter course to Dunkirk or to Fayette, at the mouth of Silver Creek. This latter place has claims for its natural advantages for a harbor, and probably will receive attention at some future day.

In running the line to the head of the Conewango, and from thence beginning to descend the declivity towards Lake Erie, I was in hopes of finding ground favorable for descending at 50 or 60 feet per mile, and reaching Dunkirk by that grade, and thereby doing away the necessity of stationary steam-power and inclined planes; but I found the whole face of the country so cut by gulfs and intersected by ridges, that I was defeated in my project, and abandoned it. The plan appears to me to deserve further exploration before a final decision.

I had also lines of survey run on each side of Chataque Lake, and thence to Portland, which are particularly mentioned in Mr. Ellet's report to me; but I have not had maps and profiles of them made.

In selecting the Casadaga route, I have considered the advantages of its passing through the centre of the County of Chataque, and approaching within about three and a half miles of Jamestown, at present the largest of all the towns in this valuable county. Its approximation, also, to the harbors of Portland and Dunkirk, tends to entitle it to a preference, while the strong probability that improvements will soon be made in the Allegheny river so as to render it at all times navigable for steamboats, and the fact that it may now be navigated during a considerable period in the spring, render it desirable to continue the route as far as practicable, down the valley of that stream, and thereby facilitate the direct communication between the City of New York and the great valley of the Ohio. And it ought also to be borne in mind, that the construction of the road as far as this point, will go far to insure its continuation through the western states to the Mississippi river, in which event the great western branch would leave the main line near the mouth of the Casadaga creek.

The above are the general outlines of the route, but

for more minute particulars, I beg leave to refer to the Reports of my assistants, Mr. Seymour and Mr. Ellet, which are herewith presented, with the details necessary.

The total amount of linear extent from the Hudson river to Lake Erie, will be 483 miles, which distance may however be shortened from 10 to 15 miles by alterations in the route, which may be found desirable upon a further survey. The curves upon the roads are generally easy, none of them having less than 500 feet radius.

The graduation of the road has been estimated throughout, for a double track, including embankments in all cases of solid earth, and embracing all necessary bridges, viaducts, and culverts, together with the expenses of grubbing and fencing, comprehending in fact, the whole cost of the road, except that of superintending, of the damages (if any) to be paid for the land to be taken, and the expenses of the Engineer Department.

According to the report of Mr. Seymour, the expenses of graduation, thus estimated, for the 222½ miles between the Hudson river, and Binghamton, will amount to \$1,551,982, being \$6,968 10 100 per mile; and according to the report and estimate of Mr. Ellet, the expense of graduation thus estimated for the remaining 260½ miles, will be \$1,165,536 00 being \$4,478 51-100 per mile. Total graduation of the 483 miles \$2,717,518, or \$5,626 33-100 per mile, including fencing in timber land 100 feet on each side, (to prevent trees falling on the road,) and also all bridges over rivers, viaducts, culverts, road crossings, &c. &c.

Cost of grading as above,	\$2,717,518
Add 10 per cent. for contingencies,	271,751

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\$2,989,269

The cutting and embankments are all 25 feet wide, and the slopes of the embankments are one and a half base to one perpendicular. This I consider as a permanent and solid form, and calculated for stability.

The expense of superstructure will vary according to the particular plan which shall be adopted.

I have caused cross sections of several different roads now completed to be drawn, and have also drawn some which I think well adapted to the country through which the road will pass, for 400 miles, if a wood and iron road is adopted—they may be seen marked No. 5. That marked No. 2, is also of wood and iron, and is the common road as now built between Schenectady and Ballston, and such as will be built between Schenectady and Utica.

Such a road as No. 2, if built of yellow pine and oak, or chestnut, will cost in Orange or Rockland about \$2,830 per mile.

Such as No. 5, will cost about 3,400 dollars per mile.

Such as the Camden and Amboy, and the Columbia and Philadelphia road, cost 10 to 12,000 dollars per mile.

The Petersburg and Roanoke, cost about 2,600 dollars per mile, as I have been informed.

These are all for a single track, with one turn-out or siding to each mile.

If the sum of \$3,400 per mile be taken,

it amounts to	\$1,642,200
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	\$4,631,469
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Add for Engineering, &c. 3 per cent. on \$4,359,718,	130,791
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Total,	\$4,762,260
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This sum will grade and bridge over rivers the whole road for two tracks, and put down one track; which is all that ought to be done until the road is travelled nearly its whole length, and this also includes the in-

clined plane and steam power to operate upon it, and also a long and expensive wharf into the Hudson River.

These estimates are, in my opinion, liberal, and such as will make an excellent road, and, as I have before observed, there are many places where a great reduction might be made in the expense, by a small alteration of the grade. There are also very great reductions which may be made in the outlay of capital in the construction of this road, by making timber work in many places where I have made calculations of earth embankments.

There is no doubt that when a final location of a working line shall be made, the Engineer would be able to make small variations in the line which would very greatly reduce the expense. I make these remarks to show that there is no doubt in my mind of the estimate being amply sufficient for grading the road.

The bridges over the large rivers, I have also estimated higher than they will cost, if only built without regard to roofing, or otherwise protecting them from the weather. I have considered and planned these bridges to be only sixteen to eighteen feet wide, and so formed as to have a double track over them, but that so fixed as that loaded trains of cars cannot pass each other on those large bridges. I did not think so much weight as two trains of loaded cars passing different ways, ought to be permitted to pass on a bridge at the same time. It would perhaps bring fifty tons or more on it at the same moment, which is improper, unless in one long extended train.

I have also estimated one turn out, or siding to each mile. If locomotive power is used on the long easy grades before mentioned, these turn outs ought to be dispensed with, and only placed at every five or ten miles, as they are found extremely troublesome when locomotive power is used, owing to the carelessness and inattention in leaving them open, when they ought to be shut. I find that on Rail roads now in use, the test of experience has shown it necessary to take up turn outs which had been placed every mile, and only place them once in ten miles, and that at the water stations for the locomotive; and in this case the man who attends the water stations sees to the turn out being in its place, whenever the cars are coming in sight.

In making the estimate I have put down the item of fencing and also clearing away the timber on each side of the Rail road, for one hundred feet wide, to prevent trees from falling on the road. These items are of that kind, that in many instances there may be arrangements with the owners of property, to save some part of the estimated cost.

I have said that water stations, where locomotives are used, are generally about 10 miles apart. This is the case on some roads—on others these stations are 12 miles, and more distant. This is regulated by the capacity of the water cars or tanks carried by the locomotive.

The country through which we pass is admirably adapted to furnish water convenient and cheap, as the springs in the sides of the hills are elevated above our grade; so that it will only be necessary to introduce some aqueduct logs, and bring the water to the proper elevation required.

In the reports of rail roads which have been constructed and are now in use, the heavy items for pounded stone, which has been used for filling up trenches, have added very greatly to the expense. Experience has, however, satisfied most of the practical engineers that the road does not stand as well when laid on broken stone, as when laid on planks or timber, and the estimates have been made on the latter plan.

It is true, that almost every where along the line of this proposed road, there is small flat stone or gravel, or sand, and when the plank or scantling are laid in trenches, the small flat stone may be thrown in and rammed down, and they operate as drains to cast off



the water from under these timbers into the side drains; and these being properly prepared to take away all water in them, the bed of the road is kept dry and solid.

Although the appearance of the road as located, is circuitous, the curves have all more than 500 feet radius. As we have run the lines, and probably in making a final line of location, it will be found that the shortest or boldest curve need not be less than 600 feet radius. These are easier curves than some on the important roads now in use in the United States, and I do not consider that any difficulties will arise in locomotive engines turning them.

The report of the Engineer on the Eastern Division, will show two routes from the town of Liberty, in the county of Sullivan, to Shohocking, at the junction of the Popackton, or the East Branch of the Delaware, with the West Branch in Delaware county.

I have before observed, that the route down the Callicoon was preferred, because it had less difficulty as to ascent—and the Beaver Kill route would have one inclined plane near Young's Gap. This route by the Beaver Kill is, however, nearly nine miles shorter than the Callicoon route, and admitting that the tunnels, (which are represented) are made instead of going round the bend at Hawk and Sprague Mountains, then the distance will be shortened 3 miles, making 12 miles shorter.

But still it appearing on a comparison, that the saving in ascent and descent, amounted to something more than 300 feet, the easier grading on the Callicoon route, and the easier curves on the line by the Callicoon and Delaware than on the Beaver Kill route, decided my mind in favor of the Callicoon route, although at increased distance.

The law under which this survey was made, provides that it shall commence at the City of New York or its vicinity, or at such point as is most eligible and convenient.

The point on the Hudson River where the road would strike it, being still subject to further revision, and knowing that no great difficulties could arise in locating the road through the county of Westchester, the want of time and means prevented my effecting this survey. Considerations of policy would require this piece to be delayed until the other parts shall be in great forwardness, and then it will be made without doubt.

All which is respectfully submitted by  
BENJAMIN WRIGHT,  
Civil Engineer.

January, 1835.

From the Commercial Herald.

#### TAPPING LAKE ERIE.

Our northern neighbours are attempting to open a communication between the Lakes and the Atlantic Ocean by means of their Rail Road. It is well in them to do so, it will help to counterbalance the disadvantages attending their Canal transportation during their long winters—but it is wise in us supinely to lay still until their work is finished before we begin?

We can tap Lake Erie at a better place than they can, and by a route much shorter than theirs. The shortest, and it is believed the best route for a rail road between the Atlantic and the Lakes would be, from Philadelphia to Norristown, Reading, Pottsville, Sunbury (thus far a rail road is made or making) Milton, Muncy or Pennsborough, Williamsport, Jersey Shore, Dunnstown, (head of Canal navigation at present) then along the north side of the west branch of the Susquehanna river, through Farrandville to the Sinnamahoning Creek, then up the valley of that stream to the Driftwood branch, and up that valley to the table land dividing the waters of Cooper's Creek, Furnace Creek, Iron Creek, and Teonista Creek on the south, from

those of Potatoe Creek, Stanton Creek, and Kenjua Creek on the north, and thence to the town of Warren; then up the valley of the Frampton's branch of Broken Straw Creek, to the land between French Creek and the South Fork, then crossing French Creek, still keeping along the dividing ridge to the land-locked harbour at the town of Erie.

Take the large map of Pennsylvania and draw a straight line from Dunnstown to the town of Erie, and then trace the above routes and see if it is not the most direct practicable routes for a rail road between the Atlantic and the Lakes, of any that has yet been suggested.

The hills generally run nearly parallel with the streams, hence almost any desirable grade can be preserved, very few ravines and still fewer streams will have to be crossed.

It is a curious and well known fact that the mountains of northern Pennsylvania do not divide the waters which empty into the Atlantic, from those which empty into the Gulf of Mexico, or from those which empty into the Lakes,—but that these waters are divided in some places by table-land, comparatively level—in one case the waters from a ditch dug on the summit level runs from one end into the Allegheny, and from the other into the Susquehanna.

By following nearly the same course as above described, a Canal can be made from the present Canal at Dunnstown, to the French Creek feeder, and thence to Lake Erie—the west branch of the Susquehanna, and also the main branch of the Sinnamahoning Creeks, are for the most part for very level streams—so much so that in descending in a Canoe above when we became tired of rowing, and were resting on our oars, the wind would sometimes blow up the stream. There is plenty of water on the summit level—so says

ONE WHO KNOWS.

#### "FIRE ASSOCIATION OF PHILADELPHIA."

At a stated meeting of the Board of Delegates of the Association, held on Monday evening, the 2d inst., the following preamble, resolutions, and recommendations were adopted.

Whereas, the frequent occurrence of riots and disorders at fires, and in going to and returning from the same, among the members of the Fire Companies, is one in the highest degree disreputable; and calculated to involve the Department in disgrace—and whereas, it is incumbent upon every member of the Fire Department, who properly regards his own reputation, and that of the Company to which he is attached, to give his most strenuous aid in endeavoring to put a stop to all violations of order and breaches of the peace.—Therefore,

Resolved, by the Delegates of the Fire Association, representing nearly all the Companies of the City and County of Philadelphia, that among firemen, actuated by good motives, and governed by correct principles, there is not the smallest occasion for riotous disturbances at fires, in going to or returning from the same, or at false alarms, and that all such disturbances are without apology or excuse, and most disgraceful to those concerned.

Resolved, that the leading principle upon which all Fire Companies is based, is pure benevolence, and that pure benevolence can never justify a resort to violence.

Resolved, that believing that many of the disturbances among firemen originate with idle and mischievous boys, who are permitted to assist in conveying carriages to and from a fire, and who, in consequence of this permission frequently assume the prerogatives of members, and class themselves as members, though not recognized as such by the companies, the Delegates do earnestly recommend the adoption by each company of the following suggestions:—

**Recommendation 1st.**—That no boy be permitted to take hold of the rope of any carriage, at any time or in any manner to assist or participate in the duties of firemen, as connected with company arrangements.

**Recommendation 2d.**—That no Fire or Hose Company's apparatus be removed from its location, between sunrise and 10 o'clock, P. M. on Sabbath days, nor on secular evenings, between sunset and 10 o'clock, P. M. unless the State House Bell shall ring or unless it be positively known to an accredited member that there is a fire.

**Recommendation 3d.**—That no person be admitted as a member of the Fire Department under the age of 18 years; and no person of any age, whose habits are believed to be irregular and disorderly, and likely to bring the department into disrepute.

**Resolved,** That as the labors of firemen are materially embarrassed at fires by the crowds of boys and others, who render no assistance in arresting the progress of the flames, the Delegates do earnestly recommend to all parents, guardians and masters, having children and youth in charge, to prevent them from leaving their homes in times of fires or alarms, and also to prevent them from congregating in the vicinity of Engine and Hose houses, by which the peace and the quiet of our citizens are disturbed.

**Resolved,** That the foregoing be signed by the President and Secretary, and a copy thereof be sent to the President of each Engine and Hose Company in the City and County of Philadelphia, with a request that the same be submitted to the action of the Company over which he presides, and that the Preamble, Resolutions and Recommendations be published in all the daily and weekly papers. By order of the Board of Delegates.

PHILIP GARRETT, President.

ANDREW BUTLER, Secretary.

### THIRTEENTH ANNUAL REPORT,

*To the Mercantile Library Company.*

In obedience to the requisitions of the Constitution of this Company, the Board of Directors submit the following report.

The course of events during the past year has not produced any changes of consequence to the interests of the institution. It has been tranquilly moving forward in the path of its usefulness, augmenting the sources of information, in proportion to its means, and the Board cherish a confidence, which they believe to be well grounded, that the objects of the company are in a safe and sure train of gradual accomplishment.

In pursuance of a recommendation at the last annual meeting of the Company, that the Board of Directors should endeavor to procure more commodious apartments for the accommodation of the visitors to the Library, this subject has engaged much of their attention. It has not been found practicable to obtain such a situation, as would unite the advantage of spacious accommodations, permanence and a central position, convenient to the greater part of the stockholders and subscribers who visit the Library.

Several points for a new location have been suggested to the Board, and their advantages and disadvantages have been particularly examined and discussed. In some it has been found that the rent demanded was higher than the present resources of the company would warrant. In others, not subject to this objection the security of the Library, the value of which is daily appreciating by the addition of new books, was not considered as great as its present location, evidenced by a demand for an increase of premium on the Insurance against loss by fire, while in other situations which have been proposed, the advantage of a central position in the more densely populated portions of the city was not to be attained.

That a change of location is necessary, the Board are abundantly convinced. But they are of opinion that the change should not be made, until it can be done upon a footing of permanence, and so as to render any future removal unnecessary, at least for many years to come.

This can be done only by the purchase or lease of a property suitable for the purpose; and in the opinion of the Board, the former would be the most desirable.—From information which they have obtained in the course of their inquiries into the subject, they conceive that opportunities may present during the coming year, by which their successors in office may be enabled to secure a suitable location for the library, and they would respectfully recommend the subject to their particular attention.

Several subscribers having neglected to pay up their subscriptions, and refusing to do so when called upon for that purpose by the collecting officer, the Board have caused their names to be stricken from the list of subscribers, in pursuance of the provisions in the constitution to that effect. While advertising to this subject, the board takes occasion to say, that the advantages of the institution would be much increased by a more punctual attention on the part of the stockholders and subscribers, to the liquidation of the semi-annual payments due from them. The expense of employing an agent to collect these sums, is considerable. If saved, it could be appropriated to the purchase of new works; and the want of punctuality in the receipts leaves the treasury sometimes bare of funds.

To all who feel an interest in the success of the institution, the mere statement of the case, will, the Board believe, be sufficient to prevent its recurrence and to insure greater punctuality in the receipts.

The number of members composing this company at present, 570, of whom 475 are stockholders and 95 subscribers.

There remain on hand twenty-eight shares of stock.

The number of volumes in the Library is at present 4,489, of which 325 have been added during the year which has just expired. Of these, sixteen volumes were presented to the Library by C. N. Buck, Junr. and five volumes were presented by Thomas P. Cope, Esq.

During the past year there have been loaned out for perusal 12,311 volumes.

There are seven daily newspapers, and eleven monthly and quarterly periodicals, subscribed for by the company.

The receipts for the past year have amounted to \$1,299 and 60 cents. The expenditures for the same time have been \$1,323 and 36 cents; leaving a balance due from the company to the treasurer, of \$23 and 76 cents.

The receipts for the present year are estimated at \$1,325. The expenditures at \$1,020, leaving an estimated surplus of \$300, applicable to the purchase of new books.

The Treasurer's Report contains the details of the several items of receipt and expenditure and the ground of the estimates for the present year which is herewith respectfully submitted.

The objects of the foundation of this institution were of the purest character—calculated to afford, to a wide spread and most interesting circle of society, access to standard works, in the current literature of the day, and the records of passing events, at a reasonable expense—creating inducements for the appropriate employment of valuable time, to the acquisition of knowledge. It has been a source of unmixed gratification to the Board of Directors to observe that its advantages have been appreciated, and that a large number of visitors have availed themselves of the opportunities which it has afforded.

The increase of the Library widens its sphere of usefulness, and adds to its attractions, for all those who are anxious to inform themselves; and the Board of Directors, in surrendering their charge over its interest to their successors in office, express their warmest wishes for the continued prosperity of the institution, and its increasing influence upon the welfare of those who embrace the opportunities it holds out for improvement, and the good order and happiness of society.

All of which is respectfully submitted.

By order of the Board,

THOMAS P. COPE, President.

JOHN WELSH, JR. Secretary.

Philadelphia, Jan. 1835.

The following persons were duly elected officers for the year 1835, viz:

#### DIRECTORS.

Thomas P. Cope,	Thomas Biddle,
Wm. M. Walmsley,	John M. Atwood,
Joseph H. Dulles,	John M. Van Harlingen,
John Welsh, Jr.,	John A. Brown,
Chas. W. Churchman,	Geo. W. Edwards,
Nathan Dunn,	Davis B. Stacey,
	and Isaac Barton.

Treasurer, JOHN FAUSSET.

#### WEST PHILADELPHIA RAIL ROAD.

Extract from the Report of Mr. Henry R. Campbell, Engineer, upon the routes proposed for the West Philadelphia Rail Road.

With a wish to furnish the committee, with all desirable information, three lines have been surveyed, which commence at a point near the permanent bridge, and form a junction near Hestonville on the Lancaster Turnpike, the first of these is the centre line, which runs nearly parallel to the Turnpike. The country through which it passes rises rapidly from the shore of the Schuylkill river to an elevation of 101 feet, which is overcome by a uniform grade of 50 feet per mile, the grading being generally heavy and expensive. This part of the line is  $3\frac{1}{2}$  miles in length.

The southern line extends down the river bank into an ascending grade of 23 feet per mile for  $1\frac{1}{2}$  miles, passes east of the alms house, and enters the valley of Mill Creek at Maylandville, which it ascends by a grade of 30 feet per mile, to its junction with the northern line above mentioned—the distance being  $4\frac{1}{2}$  miles, and greater than line No. 1 by  $\frac{1}{3}$ ths of a mile.

The northern line runs from the same point before mentioned, near the permanent bridge, up the Schuylkill River to a point near Fairmount Locks, and thence curving to the left it passes up a small ravine to an intersection with the centre line near Hall's tavern. This line is  $\frac{1}{2}$  a mile longer than the centre line, and  $\frac{1}{3}$ ths of a mile shorter than the southern line, the grade will vary from 20 to 40 feet per mile. In extending the levels and surveys from Hestonville to the Columbia and Philadelphia Rail Road, but one route presents itself as practicable, which is in the valley of Mill Creek, and rises at the rate of 40 feet per mile for a distance of 5 miles to a junction with the Columbia Rail Road, about 2 miles west of the Gen. Wayne Tavern. The estimate for grading the centre line \$120,000 and the cost of laying a double track of rails will be about \$80,000, making the cost of this route \$200,000.

The estimate for grading the southern line is \$125,000, and the cost of laying a double track of rails 100,000 making a total sum of \$225,000.

The estimate for grading the northern line, is \$130,000 and the cost of laying a double track of rails \$85,000, making a total sum of \$215,000.

The length of the proposed road by the several lines is as follows. By the centre line  $8\frac{1}{2}$  miles, by the southern line  $9\frac{1}{2}$  miles, and the northern line  $8\frac{1}{2}$  miles.

A glance at the map will afford sufficient evidence that the plan is not only practicable, but one which will be beneficial to the community, and profitable to the capitalist and stockholders.

With the best wishes for the success of your enterprise, I remain gentlemen,

Your obedient servant,

[Signed.] HENRY R. CAMPBELL,  
Dec. 27, 1834. Civil Engineer.

Live weight of thirteen sheep, raised by Jesse James, of Westtown, and weighed on the 14th day of February, 1835.

Number 1 weighed,	230 lbs.
" 2 "	214 "
" 3 "	209 "
" 4 "	208 "
" 5 "	205 "
" 6 "	203 "
" 7 "	202 "
" 8 "	201 "
" 9 "	205 "
" 10 "	199 "
" 11 "	191 "
" 12 "	187 "
" 13 "	168 "

#### PUBLIC SALE OF REAL ESTATE.

At the Philadelphia Exchange, Feb. 19, 1835.

By C. J. WOLBERT.

A Lot of Ground on Hanover street, Kensington, 116 feet by 61,	\$2,500
A Lot at the corner of Beach and Hanover street, 25 feet by 100,	1,575
A Lot on Hanover street, 80 feet by 49,	1,650
One fifth of one half of a Lot on Market street, between Schuylkill 5th and 6th streets, 23 feet by 176,	260
A Lot on Coates street, west of Ninth street, 36 feet by 154, to Melon street, on which it fronts 78 feet,	2,000
A Lot 400 feet, on the west side of Schuylkill 7th street, by 198, on Locust and Spruce sts.	38,000
A three storied Brick house and Lot on Garden street, above Callowhill street, 15 feet by 68. Subject to a ground rent of \$28,	1,500
The Pot House, Lot, &c. 35 feet on Beaver Court, by 86 feet. Subject to two annuities of £6 each,	4,040
A four storied Brick Stores and Lot on Market street, near Schuylkill 7th street, 20 feet by 170. Subject to a ground rent of \$160,	\$2,325

FALLSTON, HAEVER, 2d mo. 2d, 1835.

William Henry:

Dear Friend—Below in the account of the late cold weather in this place.

2d mo. 7,	7 o'clock, A. M.	10° below 0
12	M.	4 above 0
3	P. M.	2 below 0
9	P. M.	5 " 0
8, 7	A. M.	6 " 0
1	P. M.	4 above 0
9	P. M.	3 below 0
9, 7	A. M.	19 " 0
12	M.	10 above 0
9	P. M.	4 " 0
10, 7	A. M.	10 below 0

The morning of the 9th was the coldest I have any record of in this place, being 120° colder than the hottest day last summer, being at one time 101 degrees which was five or six degrees warmer than I had before known.

Respectfully,

A. W. T.

N. B.—A thermometer should be placed in the shade, free from any remote reflection, and detached from any building.—Beaver Argus.

## THE WEATHER.

State of the thermometer at the State Capitol Har-  
rington, during the late cold weather On Friday  
morning it began to relax.

	Sunrise.	10 P. M.	Sun Set.	Wind.
Thurs. 26 Feb.	27	31	33	W.
Friday 27	20	23	24	N. W.
Satur. 28	10	22	16	W.
Sund. 1 March	9	22	23	S. W.
Mond. 2	6	30	33	S. W.
Tues. 3	14	21	24	N.
Wed. 4	10	24	27	W.
Thurs. 5	10	36	35	N. W.
Friday 6	16			

## THE REGISTER.

PHILADELPHIA, MARCH 14, 1835.

## RECORD OF THE WEATHER.

Feb. 16. The streets and trees covered with a glaze  
of ice, rain having fallen and frozen.

21. The Delaware opened and some vessels  
came up.

27. A snow storm commenced last night, it fell 3 to  
4 inches deep.

March 1. Severely cold all day, and the night nearly  
as cold as any we have had this winter.

2. At dawn of morning the mercury only 4° above  
zero, the rivers again closed for the third time this  
season—a very rare occurrence—the navigation of both  
rivers continued obstructed till the 9th instant.

10. One of the most stormy days we have had this  
winter. It rained in the morning—from 11 till 1 o'clock,  
it hailed, and then began to snow. The snow fell in  
greater quantities, and more rapidly than we ever re-  
collect to have seen—notwithstanding the bad founda-  
tion from the preceding rain, the ground became soon  
covered, and in about an hour the snow had fallen to the  
depth of three or four inches, it ceased about sun-  
down, and left the surface covered to the depth of  
eight or nine inches. It was decidedly the greatest fall  
of snow the past winter. Wood became so scarce as  
to command for oak \$8 to 9, and hickory 11, during the  
period when the river remained closed; the price has  
now fallen to the old rates.

## EXPENDITURES OF THE CITY.

From the Annual Report of the City Commissioners  
we learn that there were expended in 1834,

For new paving,	\$31,912 33
Unpaved streets,	5,912 65
Cleansing the city,	32,463 43
Docks and sewers,	8,456 15
Lighting and watching,	49,934 30
Pumps and wells,	4,056 12
Regulating ascents, &c.	953 37
Expenses of offices,	974 76
Services with market,	712 90
Incidental expenses of Councils,	251 92
Repaving over water pipes,	11,303 52
City property,	33,136 97
Purchase of paving stone,	221 95
Repairing footways,	764 66

Expenses authorized by Councils, 10,225 96

Broad street rail road, 2,372 31

\$193,653 50

Of which about 7000 were for account of the pre-  
ceding year.

The rental of the city property for 1835 is computed  
at \$40,221 00.

## THE WATER WORKS.

We have received the annual Report of the watering  
Committee, from which the following particulars are  
derived for the present week. In a future number the  
report at length, and such of the statements as are most  
interesting to the public, will be given.

The expenditures in 1834 were \$65,163 36, viz:

For distribution,	\$4,930 42
For iron pipes,	22,322 64
For buildings,	6,047 00
For Fair Mount works, and balance due	
T. D. Grover, in 1833,	14,599 81
For wheel and pump No. 6,	10,965 90
For water power,	2,182 49
For incidentals,	875 10
Salaries,	5,240 00
	\$65,163 36

The amount paid into the Treasury in  
1834, from water rents and for articles  
sold is,

\$85,524 32

The estimate for incidental expenses for  
1835 is,

14,000 00

For permanent expenses,

30,000 00

Total, \$44,000 00

The extent of iron pipes laid in the city in 1834, was  
13,597 feet, making with those previously laid 271,355  
feet, or 51½ miles, and there are 30½ miles in the dis-  
tricts, making 82½ miles of iron pipes.

There are 741 fire plugs in the city and districts.

The amount of water rents for 1835 is, \$90,531 00

The number of water tenants is 14,395, and about  
2,500 families use the public hydrant pumps in the city  
being equal to 16,895 tenants.

The quantity of water used in the city and districts,  
averages 3,400,000 gallons per day—or about 200 gal-  
lons as the daily consumption by each tenant. The  
daily consumption in London is about 180 gallons to  
each tenant.

During the drought in July and August last, the con-  
sumption frequently exceeded 5,000,000 gallons per  
day.

The whole cost of the permanent parts of the Fair  
Mount Water Works including real estate, water power,  
buildings, reservoirs, iron pipes, &c. from their com-  
mencement to the 31st of Dec. 1834, was \$1,264,292 36  
of which sum the iron pipes cost \$530,343 46.

The increase of water rents in 1834 was \$4,991.

In 1803 there were only 77 water tenants, and the  
revenue was \$537; now there are 16,895 tenants, and  
the revenue for 1835 \$90,531 00

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

**VOL. XV.--NO. 12.**

**PHILADELPHIA, MARCH 21, 1835.**

**No. 376.**

## REPORT OF THE WATERING COMMITTEE.

*To the Select and Common Councils of the City of Philadelphia.*

The Watering Committee, in obedience to the established regulation of Councils, present their annual report, with the accounts necessary to elucidate their expenditures, and proceedings of the last year, and an estimate of the sums which will be required to carry on the works of the present year.

The amount of the estimate of the last year, and the sum granted by Councils for liquidating the unsettled account of Thomas D. Grover, for repairs of the engine building at Fair Mount, and for laying iron pipes, not included in the estimate, is as follows:—

The estimate for the support of the works in 1834, is	\$52,933 00
For the objects above mentioned,	14,000 00
	\$66,933 00

Of which there has been expended during the year, as per accounts Nos. 2, 3, 4, 5, 6, 7, 8, and 9, as follows,	
For the distribution,	\$4,930 42
For iron pipes,	22,322 64
For Fair Mount Works, and balance due T. D. Grover in 1833,	14,599 81
For building,	6,047 00
For wheel and pump No. 6,	10,965 90
For water power,	2,182 49
For incidentals,	875 10
For salaries,	3,240 00
	\$65,163 36

Leaving a balance in favor of the works, of \$1,769 64

The Committee have the pleasure to state that all the work contemplated to be done as per former report, has been completed, and although many additions and improvements have been made in the progress of the work, the expenditures are still within the estimate.

The expenses of the distribution, which embraces the necessary repairs of keeping the hydrant pumps, fire plugs, and other devices in order, must gradually increase with the extension of the pipes of conduit, which, during the present year, have been carried along Chestnut street, from east of Schuylkill Fifth to Beach street, along Beach street to Pine street, and along Pine to Willow street. Pipes have also been laid on both sides of High street, from Schuylkill Eighth to Fourth street, and in Seventh and Schuylkill Sixth streets, from near Chestnut to High street, and in Schuylkill Fourth to Filbert street, and down Filbert from Schuylkill Fourth to Third street. These, with pipes laid out included in the estimate, amount together to 13,597 feet, which, added to the account of pipes laid in former years, from 1819, exceed fifty-one and a quarter miles.

There being but few applications yet made for the extension of the iron pipes the present year, the Committee have only estimated the sum necessary for 1835, at 8,000 dollars, but it is presumed that an application will be made by the Watering Committee of Moyamensing, to have the sixteen inch iron main carried along Cedar street, from Broad to Eleventh street; in that case, should the application from new water takers justify the expense, a further sum of 7,500 dollars will be wanted.

During the last summer, a general repair was made to the works at Fair Mount, by painting the buildings and fences, regulating the grounds, building a wall on Schuylkill, and paving on the Upper Ferry road, on Coates's street, and Fair Mount street, and the walks of the garden plot. These improvements, with the additions and repairs to the fences, and putting 3,132 yards of rubble stone on the dam, have placed the works in a safe and handsome condition.

The engine building, which had stood in a dilapidated state since the erection of the water power works in 1822, have, according to the resolution of Councils, been repaired. At the time the estimate for this object was handed to Councils, it was contemplated only to repair it partially, but after having commenced with taking out the old walls, and timbers formerly applicable to the steam engines, it was found necessary, for the support of the floors, to connect them with the framing of the roof, and to go further than was first intended; and finally, it was concluded that unless a perfect repair was made, the estimated sum would be uselessly expended; consequently the estimate has been exceeded by the additional work done, and by furnishing the saloon.

The increased demand for water, necessary for the supply of the city and the four districts which receive it, induced the committee to recommend in their last report the placing of another wheel and pump at Fair Mount. During the present year, this work has been done, and the new machinery was put into operation in November last. The Committee, in reporting on this part of the works, take pleasure in stating that the execution of the wheel and pump No. 6, made by Levi Morris & Co., has given perfect satisfaction, and it is believed that this work excels any other of the kind that has been executed at Fair Mount.

The Commissioners of the District of Kensington, with whom a contract was made for supplying the citizens with water in 1833, have not yet made arrangements for receiving it, it is presumed that they will commence laying pipes early this spring.

The suit existing between the city, and the Commissioners of the district of Spring Garden, in relation to ground on Coates's street, has not been settled. It is presumed that the case will be reached early this spring; so soon as this controversy is determined, it will be expedient to finish the ice breaker and guard walls, for which no estimate at present is given.

In the estimate of the present year, a sum is embraced for finishing part of the reservoir No. 4, which will contain about 3,500,000 gallons of water. The Committee propose, with the sanction of Councils, so soon as this work shall have been accomplished, to proceed with the completion of the remainder of the reservoir, which will cost 50,000 dollars; after which the embankments and ornamental parts of the whole mound at Fair Mount, may be finished in a style that will surpass for beauty and convenience any other work of the kind extant.

The Committee not having succeeded in obtaining a suitable design for a fountain to be placed at Fair Mount, propose advertising for plans and estimates, and have embraced a sum which they deem sufficient for the object, and for finishing the head pier of the dam, in the estimate of the year.

The amount paid into the city treasury for water rents in 1834, as per Register's accounts No. 2, and the sum paid in by the superintendant for articles sold, is

To which add balance remaining in the treasury in favor of the Water Works for 1834,	\$85,524 32
Being together,	1,769 64
From which deduct charges against the works in 1834, for incidental expenses, viz., working machinery, painting, and other repairs, and for the distribution, &c.,	\$87,293 96
	14,000 00
Leaves,	\$73,293 96
From which deduct, in aid of the sinking Fund in 1834,	17,000 00
Leaves,	\$56,293 96

The cost of the permanent improvements of the Water Works, viz., for iron pipes, new wheel and pump, for paving footways, and street pavement in Coates's street, building wall on Schuylkill, &c. in 1834, was \$51,163 36.

The amount of the duplicates of water rents for 1835, as per Register's account No. 16, is \$90,531 00

From which deduct, for the incidental expenses of the Water Works in 1835, as per estimate No. 12. \$14,000 00

And in aid of the Sinking Fund, 17,000 00

31,000 00

Leaves a balance, which may be taken in aid of the tax fund for 1835, of \$59,531 00

It is proper to notice, by reference to the report of the last year, that the committee stated that 52,933 dollars would be necessary to carry on the works in 1834, as per estimate, and that they had retained from the surplus of the previous year \$7,201 26, to settle the account of Thomas D. Grover, and appropriated the remaining sum of \$4,758 85, for laying iron pipes in streets where applications should be made for a supply of water in 1834. These sums, with 3,500 dollars previously appropriated for the repairs of the engine building, together amounted to \$15,456 11, instead of being reserved for the objects mentioned, were taken in aid of the tax fund; in consequence of which the committee, in December last, were compelled to apply to Councils for an appropriation of 14,000 dollars, when,

if these amounts had been permitted to be applied as was proposed, a surplus of \$3,225 75 would have remained in the treasury, after the payment of all the debts due by the works in 1834.

The Committee are led to believe that the difference existing between the city and the Schuylkill Navigation Company, will shortly be settled in a friendly manner; but should they fail in their expectations, it will not be for want of attention on their part.

The Committee, in closing this report, take pleasure in stating that the works are in the best condition, and that should no casualty or deficiency of water occur from drought, or by a diversion of it from the works at Fair Mount, they flatter themselves that the income from the important trust committed to their care, will be increased during the present year to one hundred thousand dollars.

JOHN P. WETHERILL.

Chairman of the Watering Committee.

PHILADELPHIA, Jan. 22d, 1835.

No 12.

### ESTIMATE FOR THE YEAR 1835.

#### Incidental Expenses:—

For working the machinery at Fair Mount, and for materials,	\$2,500 00
For lumber, castings, and sundries for the distribution,	5,500 00
For salaries and incidentals,	3,500 00
For the payment of taxes, white-washing, and for sundries at Fair Mount,	2,500 00
	14,000 00

#### Permanent Expenses:—

For the completion of the fountain, and head pier of the dam, &c.	7,000 00
For finishing part of Reservoir No. 4, and embankments of ditto,	15,000 00
For the extension of the iron pipes, incidentally,	8,000 00
	44,000 00

FREDERICK GRAFF,

Superintendent of the Fair Mount Water Works.  
December 31st, 1834.

No. 13.

### ACCOUNT OF IRON PIPES LAID IN 1834.

	<i>Fet.</i>
As per former reports, commencing October 1819, up to 31st December 1833,	257,758
Pipes laid in 1834,	13,597
Iron pipes laid from October 1819, to December 31st 1834, being upwards of 51½ miles,	271,355

#### Statement of the cost of the Permanent parts of the Fair Mount Water Works, continued since the last report December 31, 1831.

For ground purchased previous to 1831,	\$116,834 00
1832, paid for lot purchased of the Schuylkill Bridge Company,	3,000 00
For ditto of Henry Moliere,	1,000 00
	\$120,834 00
Paid previous to 1831, for the water power at the Falls,	150,000 00
For the extra water power purchased of the Navigation Company,	26,000 00
For damages by overflowing ground, &c.;	25,958 41
And for building dam, canal, &c.,	160,904 77
	362,863 18

Paid previous to 1831, for mill building, and three wheels,	78,370 43	
Ditto, for three pumps and mains,	12,373 43	
Ditto, for wheel and pump No. 4, &c.	12,589 42	
1832, paid for wheel and pump No. 5, &c.	10,596 08	
1834, ditto. No. 6,	10,965 90	124,895 26
Paid previous to 1831, for Reservoir No. 1,	29,135 58	
Ditto, ditto, No. 2,	10,202 87	
Ditto, ditto, No. 3,	24,521 70	
And on account for ditto, No. 4, unfinished,	20,669 01	83,929 16
Paid previous to 1831, for 2 iron mains of 20 inches,	131,617 48	
Ditto, for iron pipes laid in the city,	\$335,046 82	
Pipes laid in 1832,	29,468 55	
1833,	11,887 97	
1834,	22,322 64	
	398,725 98	530,343 46
Together,		
And there has been expended additional since 1831, for permanent work—		
For a guard pier and ice breaker, &c.,	16,873 34	
For the repairs of Engine building,	6,235 76	
For safety banks to the reservoirs,	2,701 40	
And for stone and Brick pavements, backing the dam with rubble stone, relaying part of the 22 inch iron main along the rail road, and fitting up the garden plot for fountain, &c. &c.	15,616 80	41,427 30
Making the cost of the works to December 31, 1834,		1,264,292 36

	Feet.	Feet.
Iron mains laid previous to 1831,		19,722
Iron pipes laid in the city,	212,243	
Ditto, laid in 1832,	16,296	
Ditto, 1833,	9,497	
Ditto, 1834,	13,597	
	251,633	
Together, equal 51½ miles, or	271,355	

Cost of iron mains laid previous to 1831,		\$131,617 48
Iron pipes laid in the city,	335,046 82	
Ditto, laid in 1832,	29,468 55	
Ditto, 1833,	11,887 97	
Ditto, 1834,	22,322 64	
	398,725 98	
Together,	530,343 46	

Being an average for the two mains of \$6 63 per foot.  
And for pipes laid in the city of 1 58 per foot.

No. 16.

#### STATEMENT,

*Showing the amount of the Duplicates of water rents for the City and Districts, for the year 1835.*

Amounting, as per accounts, to wit,		
City, (Southern District,)	25,578 25	
City, (Northern do)	25,848 50	
On Girard estates in the City,	435 00	51,861 75
Northern Liberties,	17,776 75	
Spring Garden,	11,011 25	
Southwark,	8,739 25	
Moyamensing,	1,142 00	38,669 25
Making the handsome sum of	90,531 00	

No. 22.

## STATEMENT,

Showing the increase of water rents in the City and Districts, during the year 1834.

Amount of increase, to wit:—	
Spring Garden	\$1,474 75
Southwark	563 25
Northern Liberties	897 50
Moyamensing	220 25
	<hr/>
City	\$3,155 75
	1,835 25
	<hr/>
Increase for the year	\$4,991 00

No. 24.

## STATEMENT,

Showing the amount of water rents, and the amount received in the sale of old materials, as paid into the city treasury to the credit of the Watering Committee, from the year 1802 to the year 1835, viz:

City water rents, &c., from the year 1802, to the year 1834,	\$679,773 93
For the year 1834,	51,809 45
	<hr/>
	731,583 38
Spring Garden, from 1826, to and including the year 1834,	39,422 42
Southwark, do. do. do.	42,113 23
N. Liberties, do. do. do.	85,948 24
Moyamensing, from 1832, to and including the year 1834,	1,560 77
	<hr/>
	\$169,044 66
For old materials, as per account No. 32,	46,202 44
	<hr/>
	\$946,830 48

Making,

	Number of water takers.	Amount of water rents paid for 1835.	Miles of water rent on pip's laid.	Fire plugs erected.	Whole amount of water rents paid into the treasury.	Whole amount of Whole amount for per account No. 32.
City	9,407	\$51,861 75	51 1/2	410	\$731,583 38	\$46,202 44
Spring Garden	1,433	11,011 25	9	89	39,422 42	
Southwark	1,127	8,739 25	8 1/2	94	42,113 23	
N. Liberties	2,285	17,776 75	11 1/2	121	85,948 24	
Moyamensing	143	1,142 00	2	27	1,560 77	
Old materials					46,202 44	
	14,395	\$90,531 00	82 1/2	741	\$946,830 48	\$46,202 44

SAMUEL W. KUSH, Register.

Showing the amount of cash paid into the City Treasury, for water rents, and from the sale of old materials—and also, the number of water takers, of miles of iron pipes laid, and fire plugs erected in the city and districts, from the commencement of the works to the 31st December, 1834.

## STATEMENT,

No. 37.

The Register believing that it will be gratifying to Councils, submits, in connection with other statements, the following and pleasing contrast between the number of water takers, and revenue arising therefrom, during the year 1803, and the year 1835.

Number of houses, &c., supplied with Schuylkill water, December 31, 1802.

77 Dwelling houses, supplied for holders of water rights. Supplied on rent, viz:	
61 Dwelling houses at \$ 5 00 per annum	\$305 00
4 Breweries	24 00 do 96 00
1 Brewery	53 00 do 53 00
1 Small brewery	10 00 do 10 00
3 Sugar refineries	20 00 do 60 00
3 Stables	5 00 do 15 00
2 Fountains	24 00 do 48 00
2 Banking houses	10 00 do 20 00
	<hr/>
	\$607 00

From which is to be deducted 14 water rights, held by those whose manufactories, &c., are supplied, being included above 70 00

Annual rent for the year, 1803 \$537 00

For the Register.

## HISTORICAL NOTES.

By REDMOND CONYNGHAM.

(Continued from page 139.)

1682. The Swedes deputed Lacy Cock to acquaint William Penn, "That they would love, serve, and obey him."

1683. Lacy Cock was a distinguished member of the first Council. This gentleman had resided in Pennsylvania a few years before the arrival of William Penn, and was held in some repute both by the Colonists and the Indian Chiefs.

1678. The Hunting ground of the Indians settled at Conestogue, laid on the head waters of the Potomac, in the Colonies of Virginia and Maryland.

1719. The Indians of Conestogue, whilst hunting, were attacked and defeated by a large body of the Shawanese Indians from the South, and were compelled to return to Conestogue, with the loss of their most distinguished Chief. John Cartlidge sent an express to James Logan, Esquire, which information was laid before the Assembly by the Governor.

The Indians who settled at Conestogue, are said in some letters, to have emigrated from Virginia—in others from Carolina; they were probably from both, for the time of their settlement was different.—The Virginia Indians having been the earliest. It is probable the number of each was nearly the same, about sixty families.

Who has not heard of "The Indian Steps?" Go, stranger, view the magnificent scenery of the Susquehanna, above M'Call's ferry—inquire for "The Indian Steps;" a Rock firmly planted in the bank will be pointed out for your observation, in which steps rudely cut by the Shawanese can be seen, by means of which, they could descend to the deep eddy, a favourite fishing place for perch and salmon.

Here in days long since passed away, stood the Co-



nestogoe Indian, with feet firmly placed in the steps, then with the spear would he strike a fish with unerring aim as it played beneath him in the eddy below the falls; he would throw each victim on the bank where it would be received with avidity by his admiring red brethren of the forest. How changed the scene. The white man now occupies "The Indian Steps"—a rope firmly fastened around his waist, in case of falling, which happens not unfrequently, he may be rescued from an untimely death. Instead of the spear, he holds in his grasp a hand net which he skilfully throws into the deep, and catches perch and Susquehanna salmon by dozens, but if he loses his balance he falls into the eddy below, from which he is drawn by his companions, who stand on the summit of the rock to watch his dexterity, and protect him from danger.

A Conestogue Indian in a speech, without any date prefixed, said,

"Beneath this Tree we buried the hatchet." Conondanta, king of the Conestogue Tribe.

*Shackamazan*—The meaning of this word, as I have been informed, is—"a residence of an Indian Tribe tributary to another Tribe." The Indians who resided at Shackamaxan were called Delawares, by the white settlers, but they did not then call themselves Delawares.

The Treaty made in 1682, at the house of Captain Lassee Cock, calls them Indians, but gives not the name of the nation.

On page 428, of Proud's history, will be found a Treaty of William Penn with the King of the Susquehanna, Minquas or Conestoga Indians, Wapaththa, King of the Shawanese, Weéwinjaugh, Chief of the Ganawese, Ahaohassough, Great King of the Onondagoes.—Philadelphia, April 23, 1701. The speeches made were of an interesting description, and the whole scene highly imposing. This was a confirmatory Treaty. William Penn permits the Potomac or Maryland Indians to settle within the Province of Pennsylvania.

The Indian Kings of Conestogue and Susquehanna, ratify and approve of the Treaty made on September 13th, 1700, of the sale of Conestoga Manor to William Penn. All the Chiefs in attendance or present.

The Minqua Nation was not a tribe of the Five Nations, having settled at Conestogue they were thence called Conestoga Indians. They sent messengers to Penn's Commissioners at Shackamaxan, in the summer of 1682; some of their Chiefs attended at the Great Conference or Treaty with William Penn in December of the same year, when certain lands were assigned them as a residence forever; the right of the soil having been purchased of the Indians by William Penn. The Chief of the Minquas made a Treaty on September 13, 1700, which was ratified by all the Chiefs, on April 23, 1701. (See Franklin's Narrative of the Massacres of the Conestoga Indians in Lancaster county.) The Minquas, after their settlement at Conestoga, became dependant on the Five Nations. This Tribe of Indians was remarkable for their love of peace and fidelity in

their promises. It is recorded—that once every year they sent a Delegation to the Proprietary or Governor, with presents assuring him of their fidelity to the first Treaty or Treaties.

If the Shawanese Indians settled in Conestoga in 1698, it is not a little remarkable, that they should be required to sell or relinquish that right, in the year 1700, by the Treaty of that year. But the state of the case was this. William Penn first obtained by purchase, a right to the soil, and then gave permission to Canaudanta and his Tribe, to settle on the land thus purchased. Afterwards several other Chiefs with their Tribes moved in and settled, hence it became necessary for William Penn to hold another Treaty, and purchase from these Chiefs, their claims to the Manor of Conestoga; therefore "this land was not purchased once but twice and thrice."

The Mingo, Minquas, or Conestogue Indians were said to be of the Delaware Tribe, by some of the early writers; this is doubtful, as they removed from the South.

The Indians who resided in and about Kensington, were called Shackamaxines, a Tribe of the Delawares.

The name of Delaware was given to the Tribes of Indians living in the limits of Pennsylvania by the Europeans. This name was not satisfactory to the Indians, for tradition informs us that the name of Delawares was omitted in the Treaty signed at the house of Captain Lassee Cock at their request. The original name is said to have been Lenelope, or Lenelenope.

Before the Governor and Council in Philadelphia, July 6th, 1694.

Kyanharro and Orettyeagh, Chiefs of the Indian Nations at Conestogue. They being unable to speak so as to be understood, requested Menasses to tell their meaning.

Lacey Cock interpreted.

"The Kyanese Indians with their Chief, pursued the path to the Wigwam of Kyanharro, suddenly the Tomahawks of the Nakeese fell upon them, and they had to fight—the few that remained, reached Kyanharro—we asked a resting place—Kyanharro said—"rest."—"As the Conestogue Indians have been protected by Onas—we ask to be your Children."

The Governor requested Lacey Cock to answer for him.

"Your old Chief too infirm for travel, gave you good advice—attend to his counsel—take your rest at Conestogue—Onas will protect his Children."

LACEY COCK, Member of Council.

From the foregoing, it appears that in the year 1694, a small Tribe of Indians settled at Conestogue, under the care of Orettyeagh and Kyanharro.

These Chiefs formed a Treaty again in 1701, with William Penn.

(Proud's History, page 429, Vol. 1. Memoirs of Historical Society, Vol. 2, Part 2. These compare with the minutes of the Conference now furnished.)

The name of the old Chief is not given.

These Minutes confirm the account that the settlement of the Minguas, &c. were anterior to 1698.

Captain Lassee Cock was a distinguished member of Council for many years, and was much respected both by the Indians and European settlers. He studied the language, and manners of the Indians, and was able to act as Interpreter on many occasions. He was present at five Indian Conferences held in front of his house, two of which were with William Penn. These five, therefore, must have taken place at Shackamaxon.—Captain Lassee Cock was son of Peter Cock of Shackamaxon. (See page 254 of Watson's Annals.)

Tradition informs us, that William Penn intended if he had continued to reside in Pennsylvania, to have built near Captain Lassee Cock's, and it is also stated that Governors Evans and Palmer resided there for many years, in front of the Treaty ground.

1st Indian Conference must have been the Conference and Treaty of June 15th, 1682, with the Shackamaxines.

2d. The Deputies from the Iriquois.

3d. The Chiefs from Conestogoe.

4th & 5th. Probably there were two Conferences held by William Penn with the Indians, for the purpose of making a deep and lasting impression on them of the views of the Benevolent Founder of this Province.

Lacey Cock attended many Indian Conferences after December 14th, 1682, but these were all held in Philadelphia, before the Governor and Council.

For the Register.

#### WILLIAM PENN.

As there are few characters more entitled to the love and respect of mankind than that of William Penn, it will perhaps be no unacceptable present to the readers of the Register of Pennsylvania, to see collected together, several circumstances which have escaped his Biographers' notice, because they had not access to the authentic sources from whence they are derived. We regret that we cannot offer any thing of his early life, but must commence our extracts and observations with his residence in his government during his last visit to Pennsylvania, when he safely arrived with his wife and daughter, in the autumn of 1699.—He had been received with open arms, and the most kindly welcome, by a very great majority of the inhabitants. Some few there were of dark and treacherous spirits, who shared not in the general joy at his coming, but who stood aloof in sullen discontent, and brooded over their own nefarious purpose of thwarting his designs for the public good, and throwing all the embarrassments in their power in the way of his government. It is not necessary to detail here the occurrences of that day, which caused his stay to be so short in the Province, but the following extracts of Letters written at the time of his departure for Europe will be read with interest. They are from the pen of Isaac Norris, sen., to his correspondents in England; some of them were written previous to William Penn and his family leaving America.

D. L.

PHILADELPHIA, 27, 8br. 1701.

"The Governour, his wife and daughter are well, their little son is a lovely babe. His wife is a woman extremely well beloved here; exemplary in her station, and of an excellent spirit which adds lustre to her character, and has a great place in the hearts of all good people. The Governour is our *Pater Patriæ*, and his worth is no new thing to us; we value him highly, and hope his life will be preserved 'till all things (now on the wheel) are settled here to his peace and comfort, and the people's ease and quiet."

"3d, 8th mo. 1701.—Our Assembly still sit, and but little is done—for the Philistians be upon us still, they are now worse than ever, believing themselves quite sure of the Government's change.—Their endeavours are, (I mean the lower county members and our own malcontents,) to leave us, if possible, without Laws or Liberties, and oppose any thing that we offer for our settlement. Our Governour is much grieved at this parting carriage of the people, and highly resents an address made to the Assembly, and from them recommended to him. I know not how things will end, but at present they have a very ill visage."

Another Letter says:—27, 8br. 1701.

This comes by our Proprietor and Governour Penn, who with his family are undertaking this hazardous voyage at too hard a season.—I earnestly desire and pray for their preservation and safety;—Him we shall want. The unhappy misunderstandings in some, and unwarrantable opposition in others, have been a block to our plenary comforts in him, and his own quiet—but these things are externals only,—our communion in the Church sweetens all, and our inward waitings and worship together has often been a general comfort and consolation, and in this I take a degree of satisfaction after all, that we part in Love, and some of his last words in our meeting yesterday, were, "That he had looked over all infirmities and outwards, and had an Eye to the Regions of Spirits wherein was our sweet tie." His excellent wife, and she is beloved by all, (I believe I may say *all* in its full extent,) so is her leaving us heavy, and of real sorrow to her friends.—She has carried under, and through all, with a wonderful evenness, humility and freedom—her sweetness and goodness has become her character, and is indeed extraordinary. In short, we Love her, and she deserves it. I hope what I have said is to thee only, (I request this, to avoid a thought I would not give room for) since they are going home, but otherwise am Proud, (if may so term it) to express my opinion, Love and affection of, and to them any where."

The writer of the above Letters was in England at that dark period of the Proprietor's affairs, when he was imprisoned on the suit of the Widow and Heirs of Philip Ford, his designing and rapacious Steward; and the following account of the arrest of William Penn, and a visit paid to him whilst in confinement in the Fleet, are also extracted from his letters of that period.

29, 9br. 1708.

Last Fifth day the special verdict at common law, for the Rent (as they call it) on the lease, went against William Penn. It is no more than was to be expected, yet I perceive it goes near him to think of a Prison, now it comes too,—though it has been his own as well as his Friend's opinion, that he ought to do it rather than pay the money, (which with costs is near £3,000) and thereby bear his Testimony as honorably against the extortion and fraud of that account, as against other evils, and bear it as a persecution. How it will terminate I cannot yet say, but believe in a few days he must yield up, or abscond till the next term, when the Principle shall be determined in Chancery, and he must appeal to the House of Lords."

LONDON, 10th, 11th mo. 1707—8.

"Governour Penn was last 4th day arrested at Grace Church Street meeting, by order of Philip Ford on an execution on the special verdict for about £3,000, he has by the advice of all his best friends, turned himself over to the Fleet, I was to see him last night at his new lodgings in the old Bailey. He is cheery, and will bear it well; and it was thought no better way to bring them to terms. At some times there are hopes of a compromise, at others they appear cold and hardened, so that there is no judgment to be made how it will terminate. I have taken pains, and sometimes seem to have made some impression on them, but when they get with their Lawyers all is blown. The principal Debt for the country not yet decided, and 'tis questionable whether this term will do it, tho' now 'tis William Penn's aim to Issue it, and bring it to the House of Lords.

This act of theirs, with the aggravation of dogging with Bailiffs to a meeting house, makes a great noise every where, but especially among Friends, and People who did not much trouble themselves before, now appears warm, and I still hope a good Issue."

(Near the same date, to another Person.)

"Governour Penn was on the 7th Instant at Grace Church Street meeting, and there dogged by the Bailiffs by Ford's order. Henry Goldney and Herbert Springett prevented their taking him out of the Gallery, by their promise he should come to them in a few hours, which he accordingly did, and then by a Habeas Corpus threw himself over to the Fleet where he has commodious lodgings, and we hope is pretty easy. I have been several times to see him, and he sent for me this evening. The Fords might have saved themselves some reflections if they had forbore such an aggravation as taking him at meeting, for as soon as this Term came on, the Bail must have surrendered him, and he would become a Prisoner of course. I presume that thou understands that this execution is upon a Judgment at Common Law for Rent (as they call the Interest of their money,) &c."

Another Letter dated 6th, 1st mo. 1708.

"Our Proprietor and Governour is still in the Fleet, good lodgings,—has meetings there,—is often visited and lives comfortably enough for the circumstance—their daughter Hannah is dead at Bristol."

And yet another, which commenting on the Proprietor's Bearing under his perplexing and uneasy circumstances, says, "that he seems to be of a nature so content with difficulties, and that after all, the Fable of the Palm is made good in him, for 'the more he is pressed, the more he rises,' and thro' all, his Foundation remains sure."

In contemplating the character of this excellent man, it is impossible not to remark the evidence afforded by his Public acts and conduct, that his mind was superior to the maxims and prejudices of the age in which he lived, an age in which principles which are now considered as unquestionable, were struggling for a reception amongst mankind, and that he spent his life, and used all the means he could command, in endeavouring to advance those Principles, and Benefit his fellow creatures.

Such characters well deserve the affectionate veneration of Posterity, and it is to this feeling which consecrates (as it were) the localities of their homes, and of their places of Sepulture, to which we are indebted for the following descriptions, from the pens of two of our citizens who have lately visited England. The first I cannot give in the words of the author, not having an extract of the Letters which contained it,—but am sure the substance is correct. "Jordans in Buckinghamshire, is about 23 miles from London—meetings are only held there occasionally, or when any Public Friend has a desire to have one called together; The house is ancient and venerable, but in good repair; a family live in that part which was separated for the women's meeting, and there is a yard and sheds for the Horses. The house is not large. Two large old fashioned windows, with small diamond shaped panes, leaded, occupy the western end; two small ones are above the Preachers Gallery, and over the Door. The little Grave yard is enclosed with a neat hedge, and kept in good order. A Book is shewn in the meeting house, in which is noted the names of many who are there interred, as William Penn and both his wives, Isaac Penington and his wife, who was Gulielma Maria Penn's mother, Thomas Ellwood and his wife, and some others, &c."

For the Register.

## HISTORICAL MEMORANDA.

*Read at the Annual meeting of the Historical Society of Pennsylvania, Feb. 1835.*

In Wharton's instructive "*Notes on the Provincial Literature of Pennsylvania*," published in our first Vol. of Memoirs, is some notice of the *Junto* instituted by Dr. Franklin, in 1727. As but few names of those practical philosophers, are there given, I take pleasure in furnishing nearly a complete list of the members, derived from the papers of my grand father, Hugh Roberts. It is a remarkable fact, and worthy of record, in connection with the names of those useful and honourable men, who associated for their mutual information,

\* The other account of the Grave, has been already published in Vol. x. p. 95.

and the promotion of the public good, that most if not all who composed the Society at one period, were born in the same year 1706. The Association consisted of Benjamin Franklin, Hugh Roberts, William Coleman, Philip Syng, Enoch Flower, Joseph Wharton, William Griffiths, Luke Morris, Joseph Turner, Joseph Shippen, Joseph Trotter, Samuel Jervis, Samuel Rhodes, Joseph Brintnall. The author of "*The Notes*," gives only the names of Nicholas Scull, William Parson, and Thomas Godfrey, making the whole number seventeen. From the arrival of Franklin at Philadelphia in 1723, an acquaintance commenced between him and Hugh Roberts, which ripened into cordial and mutual regard, and continued until the death of the latter in 1786, considerably more than half a century.

The last letter of Roberts to Franklin, is dated the 24th of 6th month, 1785, addressed to his friend then in London, as the representative of this country. It is an affectionate epistle, and shows that himself, Franklin, and Syng were the last three survivors of the Junto. It proved to be the final salutation between Roberts and Franklin, and forms a suitable appendix to this scrap of history.

## ROBERTS VAUX.

PHIL'A. 2 mo. 1, 1835.

P. S. It may perhaps be worth noting here, that I lately purchased the original painting by Birch, of the *Treaty Tree at Shackamaxon*. It is a faithful portrait, taken fifteen years before it fell, which event occurred during a storm in 1810. This interesting relic had for many years, hung on the wall of an obscure passage, at an Inn in Bristol near Philadelphia, and from long neglect, was nearly ruined. A skilful artist has, however, rendered it intelligible.

R. V.

[COPY.]

My Dear Friend B. F.—

After sight hereof, its needless to inform thee, I have lost the art of writing; yet I thankfully enjoy old age without much corporal pain. Philip Syng, the only other surviving member here, of the old Junto, labours under infirmities, keeps much at home, where I can seldom go to visit him. We are both feeble and tottering; yet younger people sometimes undertake to counsel us, in a friendly way, how we should proceed, but I am convinced that few if any, are capable of judging of the imbecility of an old man, but an old man.—We have attained to old age, truly pictured, Psalm xc. 10, and must soon fly away.

In some views it may be said that I have not lived half thy days, and yet I think I am not half a year astern, according to common computation of time, for the next American Anniversary, which is not twelve days distant, will be the commencement of my 86th year.

The bearer hereof Samuel M. Fox,\* is a young man, has lived several years with my son George, and from

\* In after life, the President of the Bank of Pennsylvania, was mainly instrumental in causing the beautiful and classical edifice to be erected for the Banking house, so ornamental to our city, and creditable to his taste.

the mildness of his behaviour, and the sweetness of his disposition, gained the affections of all our family, I freely commend him to thy notice: his intent of going to Europe, is in part to endeavour to obtain a firmer state of health.

I have often been desirous of knowing something of the exit of old men of distinguishing abilities, and from the account of most of whom I read, and I have conversed with some few, all unite in this, and wished they had been more diligent in applying their time "*to acquaint themselves with God and be at peace.*" My dear friend, I have often had the satisfaction of seeing thee gradually advance to the summit of human fame, and I most ardently wish that thy final transition may be to enjoy felicity for ever and ever.

HUGH ROBERTS.

PHILAN'A, 24th, 6 mo. 1785.

P. S.

Dr. Thomas Bond,	} died 3, mo. }	1784.	
Samuel Rhoads,			4, mo. }
Anthony Benezet,			5, mo. }

## GEOLOGY OF YORK COUNTY.

*Observations on the Geology of York County, Pennsylvania, by THOS. G. CLEMONS, read October 29, 1834.*

[Extracted from the Transactions of the Geological Society of Pennsylvania, Volume I. Part 2.]

*To the President and Members of the Geological Society of Pennsylvania.*

Gentlemen:—We, the undersigned having had the honour to be nominated by this society for the purpose of examining certain formations in the district called York County, in the state of Pennsylvania, proceeded thence, and now beg leave to offer the following observations:

The honorable members of the society are well aware that a thorough scientific examination of any district of country would require the united endeavors of several, or the long continued observations of one well educated upon a multiplicity of sciences, all more or less included in the now comprehensive term geology. The mineral constitution of any portion of the earthy surface can only be successfully developed after indefatigable, mature, and multiplied examination, of all points, and these results compared with new and distant appearances. The naturalist's attainments should be great, his physical attendants the hammer, the compass, and almost a laboratory. No stone should be left untried, no ravine, no excavation unexamined; the mineral constituents, the fossil contents should be well classed; and after the profound consideration of these, with many other characters, the observer may come to a just conclusion of the nature, geological position of one or more distinct particular formations.

His first aim should be to fix upon some distinct member of the geological series, whose position has been well determined: this must be his north star, and it is only by constant reference to, and comparison with this, his fixed guide, that the naturalist can discover his bearings. A like determination is one of great importance, and we may say of absolute necessity to the prosecution of any geological inquiry. Geological levels are to the geologist as the compass to the mariner, and we would here beg leave to call the attention of the society to the attainment of this first and all-important object of research.

The short time we spent in York county scarce enabled us to commence an examination of this district, we humbly claim the indulgence of the very learned gentlemen of the society for the meagre gleanings we now offer. We have thought that the collection of facts concerning rocks, minerals, their localities, &c. might be useful in filling up some masterly and comprehensive chain of observation. If we were all to throw down upon paper the various rocks over which we pass in our different peregrinations, but a short time would elapse before we could present to the world a mass of information orderly embodied in a geological map of the state of Pennsylvania or of the United States of America.

The county of York is bounded on the north and east by the river Susquehanna and the county of Cumberland, on the west by Adams county, and on the south by the state of Maryland. Indications of mineral deposits were here remarked at a very early period of our history. Copper was found by some of the followers of William Penn in the township of Hellam, which was included in that portion of land set apart by him as his mining tract.

Two distinct ranges of mountains divide the county. The South Mountain, which is a most important range, takes its rise a little back of Dillstown, and continues on through Maryland, crossing the Potomac below Harper's Ferry; the Conewago hills are parallel, and have the appearance of belonging to the same system. The Pigeon and Round Top hills do not much deviate from an easterly and westerly direction. It is from the summit of the last mentioned hills, that the observer descends the distant and minor highlands, and can obtain a correct idea of the physical geography of this interesting district.

The two ranges mentioned, with their spurs, cause the streams that bathe their feet to be more rapid than if the country was less hilly or more gently undulating. The numerous falls that occur are of immense advantage to the manufacturing interests of the country; mill sites abound, several forges and iron smelting furnaces have been erected, and are now in active operation. The highly undulating surface of the country, and the strata of impervious schistose rocks, give rise to numberless springs.

That portion of the soil which is termed limestone land may be known on first sight, even when the rocks are not apparent, by the admirable order in which every thing appertaining to these farms is sustained.—These lands were first settled by Germans, and their descendants retain them with a kind of religious attachment. The soil being naturally well adapted to the growth of wheat, and the farmer bestowing upon it all the labour requisite, is thus enabled to reap prodigious crops. The German farmer is characterised by his close industrious habits; and besides the prolific qualities of the earth, his great secret in farming is the quantum of labour bestowed upon a given portion, and this he could not do if he was possessed of too much, for one should never be mastered by the land; on the contrary the farmer should always rule his estate.

The slate land stands next in point of reputation, though in fertility far behind the former. The quality of the soil varies with the chemical composition of these transition rocks, which form the basis of the soil; certain varieties are passably good, whilst others are wretchedly poor. Wonders have been effected within the last few years by the application of lime. It is as if some quickening fairy queen had waved her miraculous wand over these long abandoned sterile grounds.—Thousands of acres had been lying open as barren; dwelling houses, barns, fences, &c. had been left by their owners to the dilapidations of weather and time, and they thus from the want of but one single simple, scientific application, were forced to quit their places of birth, the sites of frolic and youthful mirth, and seek an apparently less ungrateful soil in the far wilds of the

lonely west. We might express the melancholy situation of this country in the language of the poet—

"Now the sounds of population fail,  
No cheerful murmurs fluctuate in the gale,  
No busy steps the grass grown footway tread.  
But all the blooming flush of life is fled."

By the application of lime these grounds have been regenerated, the population resuscitated, the smoke is seen gently curling from the cottage in the wood, the ploughboy's whistle, and the lowing herds that fill the land with health and prosperity, have risen as from the dead. This is a living example of what science might do, and speaks loud to those who are tardy in perceiving the advantages that would result from the scientific investigation of the manifold hidden resources of the state which now lie slumbering in their wealth.

Near Dillstown, in Monahan township, on the land of Col. Eichelberger, there exists a bed of marl, which might also be happily employed in ameliorating the composition of some unhealthy soils: it might be added alone, or mixed and used in compost.

The rocks that show themselves in York county are decidedly Transition. We observed no appearance of organic remains, in place: specimens of enerinites were shown us from the bed of the Susquehanna, but they were specimens that had been carried down by the river, and cannot be considered as characterising any rocks that we saw in situ. At some former period this district was the scene of violent eruption and dislocation. The direction of the strata of these schistose rocks is from a few degrees north of north-east to as many south of south-west, lying vertical at different, though generally at highly inclined angles.

If we turn our backs upon the South Mountain, leaving Dillstown, which stands near its base in Monahan township, proceeding on through Warrington, Dover, West Manchester, on to York, we will cross in succession the following rocks, limestone, syenite, erite, greywacke, greywacke slate, or argillashist, breccia, coal, and limestone upon which the city of York stands.

#### *Limestone.*

This rock is frequently termed, and in truth is most known, as the blue limestone, from a frequent characteristic blue colour. It however is sometimes yellow and white, and almost black, in this case I have found it to be coloured with carbonaceous matter. The yellow variety owes its colour to the presence of a small portion of the oxide of iron; it is usually compact, occasionally crystalline, and passes into marble. Veins of milky quartz are contained, and detached masses are seen scattered over the surface. This rock constitutes a portion of Monahan, Hellam, East Manchester, York, Paradise, Coöorus, Heidelberg, and Maehem townships, forming a band which runs through the county from south-west to north-east, dividing the same into two pretty equal portions. In some of the adjoining states seams of limestone in concordant stratification are quarried and burnt for hydraulic cement, with the composition of which you have already been made acquainted.\* The limestone of York county is burnt into lime, which is used for building, it contains no magnesia, and is employed for the uses of agriculture. This rock alternates distinctly with the schistose rocks of the transition series, and frequently passes insensibly into shales, without any apparent line of demarcation between the two rocks. When the limestone becomes schistose it is called slate limestone; in this case there is always an insensible mixture with a different rock, the stratification being either straight or contorted.

\* Vide T. G. Clemson's paper on Analysis of divers Mineral Substances, Journal of the Franklin Institute.

In this formation there exists a cavern of considerable importance, situate at a short distance a little to the north of York; a branch flows in on one side, and reappears on the other side of the hill. There is also an opening into it from the top of the hill: a stone thrown in at this spot may be heard rumbling for a considerable time. The aperture below is too small for ingress, and owing to the precipitate descent from above, the only possible mode of gaining entrance would be by means of a rope from the summit.

#### *Felspathic and Amphibolic Rocks.*

As you leave the limestone of Monahan township, and ascend those elevations known as the Round Top hills, the rocks change and display an evident entritic character. The base of the rock, when sufficiently porphyritic to distinguish the imbedded crystals, from the imbedding substance, appears to be of a petrosilic nature, containing small dark brown or black crystals of amphibole. The base in this case predominates, and is compact, having a bright colour. It is often of easy decomposition, and is seen disintegrating at the surface of the earth; at other times, it is exceeding hard and tenacious, giving off sparks with steel, and resembling in appearance some of the Egyptian syenites, out of which sphinxes and other pieces of sculpture were formed, specimens of which may be seen in the public sculpture galleries throughout Europe, and in the gallery of the Louvre of Paris: again this rock changes, losing its porphyritic structure, passing into a compact homogeneous, sonorous, and less tenacious bluish-gray, and even black mineral, thus passing into different traps, greenstones, and Lydian stones. These hills have every appearance of having once been a centre of dislocation and elevation, and may have been upheaved after the formation of the transition series. These porphyries and diorites being of Plutonic origin, represent pre-existing rocks thus modified.

#### *Graywacke Schist.*

This rock soon makes its appearance as you descend the Round Top hills, and disappears under the bed of the Conewago creek. It has a dark blue color, and is distinctly, though not finely stratified, and follows the same direction as the phyllades of the transition series of this county, that is, from a few degrees to the north of north-east, to as many south of south-west. Its schistose structure is not evident in cabinet specimens, but it is distinctly stratified in mass. The graywacke slate of Hunterdon county, New Jersey, resemble this formation except in color; at both localities they are characterised by nodules of epidote. In York this mineral is more abundant; it is massive green, and not so mixed with foreign matter as to mask its discriminating characters. The quality of this soil for agricultural process is indifferent, inferior to the limestone land, or that of the red argillaceous slate.

#### *Graywacke.*

Immediately after crossing the Conewago creek, the appearance of the earth changes; instead of a blue, we have a dark red clayey soil, formed from the decomposition of the argillaceous schists which are seen alternating with, and always upon the confines of the sandstone, which predominates as you ascend the Conewago hills. It changes its aspect at almost every step; it is sometimes a hard ferruginous quartz rock, compact, white, red gray, and of a variety of hues, even to a black; at other times it is a well-characterised sandstone, with small crystals of hyalin quartz. The grains of quartz vary in size, and it passes into a conglomerate; the base being argillaceous, red, with perceptible scales of mica, the imbedded pebbles are generally rolled quartz, varying from the size of a millet seed up. It is occasionally of a light color, free from iron. The imbedded pebbles are uniform in size; the whole rock

is hard, and employed in the county for making millstones for the various uses to which the Burr millstones are employed. Compact ferruginous varieties of the rock are used for gudgeons or boxes supporting the axis of water and other wheels; they are found to answer this end admirably well, and have superseded those of iron or steel. In building furnaces for the smelting of iron ores, a proper hearth stone is considered a very great desideratum. The crucible is often built of bad materials, causing the furnace to be put out of blast at very short intervals, to the very great loss of the proprietors. The campaign of certain furnaces in our country is called good if the hearth has resisted one year: we know of furnaces that have been in blast constantly for twenty years, and one of the principal causes of this astonishing success is undoubtedly owing to the very great attention that was paid to the choice of the hearth stones. We will not here discuss the merits of such materials, but let it suffice to say that the quartz rock of York county has the appearance of being well fitted for this purpose, and by a proper choice we think that superior hearth stones might be here procured, if not equal to those found and used in the Hartz mountains, much better than many we have seen used for these ends in the United States.

The greywacke quartz rock caps the summit of the generality of the highlands throughout the county, there are also hills entirely composed of it. The Pigeon hills, for instance, which run from the Susquehanna to Adams county, masses or boulders are to be met with on the surface of the ground at some distance from those localities where it is found in situ. At the river Susquehanna, between Marietta and Columbia, the quartz rock forms itself into several noble bluffs. The scenery here for miles along the river may be considered as remarkably fine, and many think it equally romantic with any in our country.

#### *Cool.*

Between the Little Conewago creek and the city of York, in the townships of East and West Manchester, a thin layer of coal has been discovered in several localities by those who have sunk wells for water. It was not, however, of sufficient thickness to arrest attention. At other localities fruitless attempts have been made to find coal, and we are sorry to perceive not only in this country, but in various directions through our country very many enterprising and worthy, but too credulous citizens have been led to expend, and frequently considerable sums in searching for this valuable combustible in those places where we might say, with some certainty, coal never will be found.

Our citizens have been so frequently imposed upon by pretenders who call themselves miners, or mining engineers, because they may have dug at Mauch Chunk, or at Pottsville, or in the coal fields of Europe—and having acquired a vocabulary of terms, go about the country proclaiming that coal may be found on particular estates, and that the only reason why it has not been found is because they have not dug deep enough, or that the granite should be pierced, or, in fine, that there is coal where in the very nature of things coal could not exist. Their confidence induces the farmer thus to bury his hard earned money, and it is not until he has been duped by these spurious individuals, that he has discovered his mistake. Nor is this abuse alone confined to the searching after coal, the whole alphabet of metals may be found by a branch of hazlewood, when in the hands of the gifted pretender. We cannot cry out too loud against these charlatans, and unworthy, ignorant offenders. The facility with which these impostors deceive, arises out of the difficulty in our country of acquiring scientific information of a certain kind. The arts of mining and metallurgy are of difficult acquisition every where; they require a great deal of profound theoretical knowledge, and very close practical

observation; consequently they are by no means intuitive, and can only be purchased by long, laborious, and indefatigable exertions, not from books alone, but from the living school where the play of nature has been exposed to view, with the economy of art, where the furnace has taken the place of the crucible; nor is theory less useful, it is a glorious light which serves to conduct the operatives through the dark labyrinths of practice.

### *Breccia.*

On the confines of the blue limestone, which reappears a few miles to the west of York, there is found a breccia composed of a red argillaceous cement, and masses of older rocks. The imbedded masses are of various sizes, and the majority of them are limestone, proving its age in relation to the limestone rock. This breccia has a very pretty effect when polished, and might be used for the same purposes as are the common marbles. It continues on, and is seen at the Susquehanna not far from York haven. You are all acquainted with that beautiful pudding stone, out of which the columns that ornament so richly one of the halls in the capital at Washington have been made. This rock is precisely similar, and like that found on the banks of the Potomac is known in York county, and throughout the United States, as the Potomac marble.

### *Traumates.*

We will pass over in silence the limestone upon which York is located, it having been already described. In journeying in any direction, after leaving the city, from south-west to south east, you will shortly come to the traumates of D'Ambuison, phyllades and transition slates of other geologists. These schists are characterized by a more perfect stratification than other rocks in the county; they are straight, undulating and inclined, and follow a general direction with the other formations; that is to say, nearly north-east and south-west; the layers are divided into a multiplicity of differently characterized strata; having all the variations of texture, composition and color, disintegrating at the surface into small, variously shaped pieces, and giving various colored powders. Clay or argile is evidently sometimes the most abundant constituent; chlorite predominates, and the aspect changes, as also the texture, and form a chlorite slate; the talc prevailing, a talcose slate well characterized appears, a greenish hue denotes the presence of either, and it is difficult to say whether the chlorite or the talc most abounds. At certain times, however, and in certain localities, the talcose slate is apparently free from chlorite, and is of a reddish hue, from the oxide of iron, and divides into laminae, which have that particular satin lustre that accompanies magnesian rocks. There is a seam of red talcose slate that runs through the townships of Windsor, York, Shrewsbury and Codorus, into the state of Maryland; the width of this slate varies, and passes into chlorite slate, argillaceous slate, and a variety of slates, badly defined or characterized, and varying as either of the constituents prevail. These rocks as the rest, run nearly a north-east and south-west course. Ferruginous quartz is found upon the surface of the ground, and occurs in veins traversing the laminae, and at other times seams of quartz run parallel with the strata, and between the leaves of the same, at places, the quartz is swollen out and gradually diminishes so as to almost disappear, assuming somewhat the form of a lentille. This the German miners term *liegende stock*, an example of which we have just endeavored to describe may be seen on the Baltimore road, in Shrewsbury township, on the side of a hill, near a public house known once and marked on the maps of the county, as Wilson's tavern. Veins of quartz are common to this formation: the quartz is more or less ferruginous and frequently cavernous; sometimes it contains hæmatitic oxide of iron, at others the peroxide, impregnating the whole and

encrusting the caverns; appears to have come from the decomposition of pyrites. In some cases the iron pyrites have undergone no change, and are of the varieties yellow and white. Cubic crystals of this mineral are found imbedded, and may be found upon the surface of the soil; after a rain in small washes they may be collected with ease and sometimes in abundance. The ferruginous, cavernous or drusy quartz that is found in veins, in the talcose, or contiguous rocks, is often so friable as to be crumbled by pressure with the hand, its structure becoming schistose, a mixture with surrounding rock is apparent. The roads are mended with this mineral, and, as we have observed, it is common upon the surface of the ground in all directions in the neighborhood of these talcose, chlorite, argillaceous schist and limestone formations. These rocks, as also do the contained quartz, bear a very strong resemblance to those of the gold belt of Georgia, North and South Carolina, and Virginia; and so great indeed is the analogy between specimens of auriferous quartz from the several southern states and those of this county, as not to be distinguished but by reference to the label. My friends, Mr. Calvin Mason, and Dr. Fisher, of whom I speak with a lively feeling of pleasure, remembering with gratitude their polite attentions to me whilst in York, these gentlemen, after frequent and close research, have discovered gold in quartz at different times and different localities within the limits of the formations we have just had the honor to describe.

No mines have yet been worked for gold in this country, and it was owing to the above named gentlemen having found some particles of this precious metal in quartz, that a loose notice gained its way into some of our public journals. A short distance above Columbia, on the Susquehanna, and in the county of Lancaster, a horizontal drift has been run into that hill known here by the name of Chick's rock. This work is of trifling importance, not being in length above fifteen feet; it was then abandoned; some ore lay at the mouth of the work, and that which was pointed out to me as being good, was a heterogenous mixture of chlorite, quartz, oxide of iron, feldspar &c. The gentleman who had superintended these workings informed me that the quartz here found contained sufficient gold to pay and yield. He was then engaged in researches for auriferous quartz, in the vicinity of Keysie's ferry, in Hellam township. The country hereabout is rugged and romantic, the rocks back of the ferry exhibit indications of copper, and the gentleman who caused to be assayed many specimens of quartz found in this vicinity, discovered the gold to be most abundant in and about those places where the iron and copper met, or where different rocks came together, deranging the regularity of the quartz veins. I have also been informed that the iron ores of this county,—we speak of those near or in the limits of the gold range,—all contained gold. The presence of gold is by no means as rare an occurrence as many believe, for many sands used for making glass contain a small quantity of this metal; so little indeed is the proportion as only to be sensible by long accumulation from large quantities of sand, made evident in the manufacturing of glass. The crucibles used for containing the liquid salts, after having served for months this end, are cast off. On examination, small portions of gold have been found in the bottom of the vase. The discovery of the presence of this metal is of no importance; it is the proportion only that must be considered, and this must vary with the nature of rock, the surface of country, and a multiplicity of other considerations which grow out of the nature and mutability of things. Our object here was not to examine into the relative richness of any particular part or locality of this district, but to enable those to judge from a description of the whole, the nature of these formations when compared with those that characterize certain parts of those states in which gold has been found in sufficient abundance to interest capi-

talists, and which has now long since been an object of public attention. From the imperfect descriptions we have given, you will judge these formations to be similar. Gold has been found in quartz, visible to the eye, and when in too minute particles to be discovered by ocular inspection, it is nevertheless frequently possible to separate with advantage, the gold by chemical means.

The specimens of minerals and rocks of this country we expected to receive ere this; had they arrived we should now have offered to the society the results of chemical examination; however, we place but little value upon the results of such examinations; assays of individual specimens are by no means just expressions of the whole, still we hope shortly to furnish these results to those who desire them.

Of the prevalent rocks that are found in the lower portion, or south-east part of the county, we can say but little, not having had occasion to visit the same, but judging from specimens shown us. The hills near the Susquehanna appear to be composed principally of shining argillite or glimmer sheffer. There is a fine quarry of slate in the township of Peachbottom; the quality of this useful mineral is very good, and is much used throughout this and the adjoining counties, for roofing slate.

We subjoin a partial list of mineral species found in this county; it cannot but be imperfect, but may answer for a commencement:

**QUARTZ.**—Hyalin, milky, ferruginous, drusy, auriferous, massive, Lydiene, prase.

Colophonite, garnets, wavelite, chlorite, epidote, pipe clay, halloysite, talc, amphibole, mica, feldspar; *Carbonate of lime*, white, yellow, blue, &c.

*Marl.*

*Oxides of Iron*—octohædral crystals of, and micaceous, magnetic, hæmætic.

*Sulphuret of Iron.*

*Copper*—native, red oxide, carbonate, sulphuret.

*Gold*—native.

*Lead*—sulphuret.

The ostensible object of the author's visit to the county of York, was to examine "the gold region and gold mines." How far this end has been attained, you are the better judge. Having tarried a much shorter time than our desires would have dictated, we were prevented from examining in detail the entire mineral riches of this interesting district; still, we have endeavored to portray the leading geological features of the county.

**IMPORTANCE OF PITTSBURG.**—It is a fact and one calculated to show the importance of our local situation, that the Legislatures of New York, Pennsylvania, Maryland, Virginia and Ohio, and the Congress of the Union, have each before them one or more memorials, for improvements,—all designed to lead directly to our city.

In New York, there are the great rail road, and the Rochester and Olean Canal; in Pennsylvania, the connection with Erie, and the Ohio Canal; in Maryland, the Chesapeake and Ohio Canal; in Virginia, the same Canal, in Ohio, the two Cross Cut Canals; and in Congress, the Chesapeake and Ohio Canal; the improvement of the Monongahela, and also of the Ohio. So that the representatives of nearly six millions of people, in five states, and the representatives of the whole union may be said to be deliberating upon our immediate interests.

We have received from Mr. Denny, a copy of a letter from the Secretary of War, containing an account of the expense of transporting Arms, &c. from the District of Columbia, Harper's Ferry, and Baltimore, to

Pittsburg, and other Posts in the Western country, during the years 1830, '31, '32, '33, '34.

From Harper's Ferry to Pittsburg, \$15,107 40  
From Baltimore to Pittsburg, 17 34

\$15,124 74

This amount, and much more, might be well saved, by manufacturing arms and equipments, at Pittsburg, instead of Harper's Ferry or Baltimore. Great expense would also be saved by the completion of the Chesapeake and Ohio Canal.—*Pitts. Gaz.*

## REPORT TO COUNCILS ON GAS.

The joint special committee to whom were referred the petitions of sundry citizens, on the subject of lighting the city with Gas, under the annexed resolutions, respectfully

### REPORT,

That they have given the subject that attention which its interesting character and importance demand, and now present the conclusions to which they have arrived, after a careful examination of the question.

The resolutions under which they act, may be considered as presenting three points for investigation, and for the sake of clearness will be thus divided and treated of in order:

The first of them, is the expediency of introducing gas lighting into the city of Philadelphia at the present time. Numerous petitions have been presented to Councils for several years, urging the introduction of Gas, for the purpose of public and private illumination; and in the year 1834, the expediency of the measure having been determined by a very strong expression of the public will, a competent agent was appointed to proceed to Europe, for the purpose of ascertaining the construction for gas works, the most approved processes for its manufacture, and generally to make such observations as may be useful in the event of Councils determining to adopt a plan for lighting the city with Gas. The report of the agent has been before the public for some time, and in the opinion of the committee, is in full accordance with the spirit of the resolution under which he was appointed. We refer to it as containing a very clear exposition of the whole subject of manufacturing gas, and regret that the omission to include in it any estimate of the cost of manufacturing the article has been deemed to be an exception to its accuracy. On this head the committee ask leave to observe, that a large mass of information on this branch of the subject has been obtained by Mr. Merrick, under a pledge that it should not be given to the public through the medium of the press, but be used only to satisfy gentlemen connected with the corporation to whom the ultimate decision of the matter was to be referred. These details of the working operations of the large establishments of Great Britain, have been freely put into the hands of the committee, and we deem it an act of simple justice to Mr. Merrick, to state that he has considered them as entirely open to the inspection of any member of Council, under the limitations on which he himself received them. From the information thus put in our possession, and acquired from other sources, we have been irresistibly led to the conclusion, that it is expedient to introduce Gas lighting into the city. We now proceed to show on what ground this conviction rests, and fully recognizing the principle that no injurious publication of the affairs of the companies who have submitted their books for inspection should be made, shall withhold so much of the information received from Mr. Merrick as has not hitherto been presented to the public in other forms. Premising that the cost of manufacturing gas depends in an almost direct proportion on the quantity produced



and used, we shall submit an estimate resting partly on the testimony taken on several occasions by committees of the British House of Commons, and on the well authenticated statements of the cost of erecting gas works, &c. to be found in numerous publications.

On the authority of these statements, and making due allowance for the difference in the price of materials and labour in this country when compared with England, we believe that gas works competent to produce 75,000 cubic feet of gas daily, may be erected, and the necessary mains and pipes for distribution to the extent of eight miles, be laid by an expenditure of

\$76,000

That the floating capital necessary to carry on the works and cover incidental charges in their construction would be

24,000

Making a total of

\$100,000

To produce an available quantity of 75,000 cubic feet of gas daily, there will be required 4,380 tons of coal annually, for carbonization and fuel, which, at six dollars per ton, would be

\$26,280 00

4,380 bushels of lime for purification, at 25 cents,

1,095 00

Sixteen men for attending retorts, \$30 per month,

5,760 00

Four laborers for incidental services, \$25 per month,

1,200 00

Wear and tear of works, 5 per cent.

5,000 00

Salaries of superintendent and clerk, taxes and incidentals,

5,000 00

Making the cost of 27,375,000 cubic feet per annum,

\$44,335 00

Or about one dollar and sixty cents per thousand cubic feet, exclusive of the interest on the capital invested in the works. In this estimate, no deduction from the cost of manufacturing has been made on account of the coke and other products obtained during the process, for which it is believed a ready and profitable market exists in the city.

The sale of these products would essentially lessen the cost of production; but as the above estimate is made on the supposition that the whole quantity of gas which the works are competent to produce would be sold, is deemed more safe to omit them in giving results which are liable to be affected by the variable consumption of gas during the summer months, as in some degree compensating for the permanent charges which always remain stationary, and increase the cost of producing a diminished quantity of gas.

Deducting the comparative cost of lighting with gas instead of oil from the elements thus furnished, it appears that by the consumption of four cubic feet of gas per hour (a quantity stated by good authority to be equal to an Argand oil lamp of the usual size,) for five hours, the quantity consumed would be 20 feet, which at \$3 per thousand feet, gives the cost of such a light per annum, \$21 90; the cost of an Argand oil lamp consuming three-fourths of a pint of oil during the same time, would be for 28 gallons at \$1 per gallon \$28.— Adopting one dollar and fifty cents per thousand cubic feet as the price at which it is proposed to furnish the public lamps, it appears from a statement obtained from the City Clerk, that during the year 1834, 25,438 gallons of oil were furnished to the public lamps, and that the quantities consumed were estimated to be respectively  $8\frac{1}{2}$  gallons for the common, and 25 gallons for each Argand lamp. To obtain a light of the same intensity by the aid of gas, would require—

For 183 Argand lamps, at 8,544 cubic feet each per annum,

\$2,346 00

For 2,513 common lamps, at 2,136 cubic feet each per annum,

8,051 00

Making together,

\$10,397 00

The present cost, at 78 cents per gallon for oil, is \$19,841 64, and does not include waste by leakage, &c. which is estimated by the contractor for supplying the city with oil in a recent publication, at about 10 per cent. more. Having fully satisfied ourselves of the expediency of introducing gas lighting, we proceed to the second point of the resolution, which is to prepare a bill that shall effectually guard the city from any increase of taxation, or from any eventual loss by adopting the project. In the ordinance herewith submitted, we have endeavoured to present a plan embracing both the object of the resolution, and what may be considered as not only the wishes of the petitioners, but also of the demonstrators, namely, that the experiment shall not be tried at the expense of the city. The first and second sections of the ordinance authorize a subscription for raising a sufficient sum of money, for the construction and carrying on of works competent to manufacture 75,000 cubic feet of gas daily, and provide that as a compensation to the subscribers, they shall be entitled to the profits of the establishment, without looking to the city treasury for any other remuneration in case the project does not succeed, and reserve to the city, the right at any time to take possession of the works, and fund the stock at an interest of six per cent. per annum. The third, fourth, and fifth sections provide for the election of a board of trustees, to whom the management of the works is to be confided, define their duties and contain the necessary provisions for securing a supply of gas to private consumers at a price to be approved by Councils, and the lighting of the public lamps on such terms as will compensate for the advantages given to the subscribers by the ordinance.

The sixth section directs all moneys received or paid on account of the works, to be accounted for at the city treasury, under the usual restrictions, and the seventh section authorizes the construction of the works on the ground owned by the corporation north of the Permanent Bridge on the Schuylkill, at a fixed rent, with the right to the city to reclaim so much thereof, at any time after the year 1840, as may in the opinion of the trustees, not be necessary for the accommodation of the proposed works. This ordinance, it is believed, will not only guard the city from any increase of taxation, but will ensure the construction of sufficient extent to present the subject intelligibly to our citizens.

No loss can be sustained by the city in the event of a failure of the project, and the guardianship and control of the establishment being completely vested in the corporation, every thing connected with the public interest is effectually secured.

The third part of the resolution directs an inquiry into the terms on which a private company would furnish gas sufficient to light a certain number of public lamps, in order that the expense, the advantages and the inconvenience of the measure may be fully known. On this point the committee beg leave to state that there is at present no establishment for manufacturing gas of the kind proposed in operation in the city of Philadelphia.

The small works belonging to the Grand Lodge of Pennsylvania, are now arranged for the manufacture of Gas from Rosin, and are not of sufficient capacity for the purpose, and even in the event of our ability, to make a satisfactory contract with them, no results applicable to the manufacture of gas from coal could be obtained, having a bearing on the question, either as regards the expense, the advantages or the inconvenience of the plan submitted. An application has however been made to the Grand Lodge to which they have made the following reply. "That they could supply the city with from 10 to 12,000 cubic feet of gas

every 24 hours, at about one and a half cents per foot, and it would be indispensable that the city should provide a gasometer to receive the article as manufactured."

The committee are of the opinion, that as the experience of upwards of twenty years in Europe, has fully established the superiority of coal gas over every other means of illumination, it would be unwise to resort to a plan not only known to be comparatively unprofitable, but also creating a dependence on other states for a supply of the crude materials, when by adopting one sanctioned by an enlarged experience, we should foster one of the most valuable branches of our domestic industry, and draw our supplies entirely from the bosom of our own commonwealth. The resolution of the 26th ultimo, directs the committee to inquire as far as practicable, and report what proportion of the signers of the several memorials are minors, or non-residents of the city. On the first point, the committee are not able to arrive at any result that would be satisfactory, inasmuch as records entirely beyond their control, would be required to establish or deny the usefulness or age of many of the signers; and it is therefore dismissed from our consideration. On the second point, namely, the non-residence of signers, it appears that the signatures of owners of real estate in the city have been obtained both to the petitions and remonstrances, and that the question of residence in such cases does not appear to us to be material. It may sufficiently answer the object of this resolution to state, that about the same proportion of signers known to the committee, is to be found on both classes of the memorials. In order that Councils may have all the information before them, we lay the several memorials on the table, merely stating, in passing, that the petitions are signed by about 4000 persons, and the remonstrances by about 725.

We deem it due to the gentlemen of both parties who have been instrumental in bringing the subject before us, to state, that no fraud appears to have been practised or intended by either party. In conclusion, the committee having, to the best of their ability, performed the duties confided to them, earnestly recommend the passage of the ordinance submitted with this report, under the conviction that the public mind is fully prepared to give it a favorable trial; and that the advantages which gas presents in point of economy and safety, will gradually bring it into such general use, that the city may, in a few years, take possession of the works, and enlarge their capacity to an extent that will furnish a cheap and brilliant light for all public and many private purposes.

FREDERICK FRALEY,  
W. H. KEATING,  
JOS. LIPPINCOTT,  
JOHN WIEGAND,  
RICHARD PRICE,  
R. M. HUSTON,

*Committee.*

Philad., March 9, 1835.

#### MAHONING CANAL.

An act to amend the act to incorporate the Pennsylvania and Ohio Canal Company.

Sect. 1. Be it enacted by the General Assembly of the State of Ohio, that the Company incorporated by an act, entitled "An act to incorporate the Pennsylvania and Ohio Canal Company," passed January 10th, 1827, be and they are hereby allowed ten years, from the thirty-first day of December, in the year of our Lord one thousand eight hundred and thirty-five, in which to complete said canal, any thing in said act to the contrary notwithstanding, and that the charter of said Company be and the same is hereby renewed.

Sect. 2. It shall be lawful for the said Company an-

nually to fix, regulate, and receive the tolls and charges, by them to be received for the transportation of property or persons, on the Canal, authorized by the act to which this is an amendment, for the sole benefit of said Company. Provided, that the net proceeds of such tolls and charges thus fixed, regulated, and received by said Company, shall at no time exceed ten per cent. per annum, on the capital invested in construction and necessary expenditures of said Canal: Provided, however, that this restriction in the amount of tolls and charges, will not be construed so as to prevent said Company from fixing and receiving the highest rate of tolls and duties, together with the charges of freight to which property of a similar kind is subjected, as the costs of transportation on the Ohio Canal during the same period of time.

Sect. 3. That whenever the sum of one hundred and fifty thousand dollars, or a greater amount of the Stock of said Company, shall have been subscribed, the commissioners named in the act to which this is an amendment, shall have power to call a meeting of the Stockholders, for the purpose of organizing said Company, in the manner pointed out in the said act, any thing contained therein to the contrary notwithstanding.

Sect. 4. That said Company shall keep a fair and accurate account of the whole expense of making and repairing said Canal with all incidental expenses appertaining to the same, within the respective limits of each of the States of Pennsylvania and Ohio, together with an accurate and just account of all the tolls collected by said Company, on such part of the said Canal as lies within the territorial limits of each of said States respectively, and said States shall each have the right to purchase at any time hereafter, all that portion of said Canal which lies within their territorial limits, for the sole use and benefit of said State, by paying to said Company a sum of money, which, together with the tolls received by said Company within such State, shall equal the cost and expenses of said Canal as aforesaid, within such State, with an interest of eight per cent. per annum thereon, and the books of said Company shall always be open for the inspection of the Agents of said States, respectively appointed for that purpose by the Legislature of either of said States, and if said Company shall neglect or refuse to keep and exhibit their accounts as required by this section, when thereunto requested by such Agent, then all the rights and privileges granted by this act shall cease and be determined.

JOHN M. CREED,

Speaker of the House of Representatives.

PETER HITCHCOCK,

Speaker of the Senate.

Feb. 20, 1835:

#### CHESAPEAKE AND OHIO CANAL.

##### MEMORIAL

Of the Baltimore Convention, held the 8th of December, 1834, praying for Legislative aid to the Chesapeake and Ohio Canal, and for the passage of a Resolution, recommending the said work to the patronage of Congress.

To the Honorable the Senate and House of Representatives of the Commonwealth of Pennsylvania:

The memorial of the undersigned, in behalf of a Convention of delegates from various parts of the States of Pennsylvania, Maryland, and Virginia, and the District of Columbia, assembled at the city of Baltimore, on the 8th December, 1834, respectfully represents:

That, in conformity with the views of numerous and highly respectable popular meetings in the States and District referred to, the Convention was called into existence, and proceeded to deliberate on such measures and suggestions as were deemed best calculated to promote the further progress and ultimate completion of the Chesapeake and Ohio Canal. To the undersigned,

members of that Convention, as citizens of Pennsylvania, the appropriate duty was assigned, of memorializing the Legislature of *their* State, for aid and assistance to this great and interesting work, which, in its contemplated route, passes through a highly important section of, and in its commercial effects cannot fail to become greatly beneficial to other and extensive portions of our State. Your memorialists cannot refrain, at this time, from offering their humble congratulations to your honorable body, on the enlightened wisdom so eminently displayed in the Councils of the Commonwealth, only equalled by that Herculean labor and perseverance which has consummated for the State, a line of artificial communication throughout her whole interior, and permanently connected her interests with the rapidly expanding trade of the valley of the mighty Mississippi; laid at *her* feet the rich products of the growing empire on the borders of the Ohio, and promising in return a speedy and ample remuneration for the toil and treasure of her citizens, expended in the completion of this stupendous enterprise—an enterprise no longer doubtful—an enterprise which, in effect has changed the current of the Ohio from the west to east—which, instead of wafting on its broad and friendly bosom, to an unhealthy, remote, and precarious market, the exhaustless and varied products of the States adjacent to its borders; is now, to a vast extent, transferring them, by its ascending navigation, and through the great internal channels which the wisdom, and wealth, and public spirit of the Commonwealth have perfected, to the commercial emporium of our State.

As each returning year comes laden with an increase in the population and productions of the wide and luxuriant fields which stretch themselves out on either bank of the Ohio, unparalleled in any age or any country under the face of the *sun*; it requires no prophetic vision to foresee that, long anterior to any contemplated completion of the interesting work, (for the further progress of which we now implore the aid of your honorable body,) the canals and rail ways of Pennsylvania will be in possession of a commerce far, very far, exceeding in extent their utmost capacity to accommodate.—Even at this moment, is Pennsylvania without a rival for that great and constantly augmenting trade.—None need she fear, in future, if these views are worthy of consideration.

No conflicting interests; no matters of State policy, then, interfering between the citizens of Pennsylvania as a community, and reasonable protection, encouragement, and regard for the advance of the Chesapeake and Ohio Canal to its ultimate completion, your memorialists approach the Legislature of Pennsylvania with the less reserve, and with re-assured confidence of success, imploring you, that the mighty arm of their own great State may be outstretched for its relief, in this the “hour of its need.” Surely shall we not ask in vain, when we remind your honorable body, that the aid which we invite and trust will not be refused to the great work under consideration, will be returned and repaid in the advantages and facilities of trade which will be afforded by its construction, to a large number of your immediate constituents, (unrivalled for their industry and enterprise,) inhabiting the several counties of Somerset, Bedford, Franklin, Fayette, Washington, and Greene, on our southern borders; who have hitherto borne, without a murmur, their proper proportion of the burden, but who, from their local position, are deprived of many, if not all the advantages which other portions of the State enjoy from the construction of our own works of internal improvement.

At a former Session of the Legislature of Pennsylvania, a joint resolution of the two branches, to the following effect, was passed with more than usual unanimity:—“That the Senators in the United States Senate, and Representatives in Congress of this State, are requested to endeavour to procure the passage of a law authorizing the subscription of a *million* of dollars

on the part of the General Government, to the stock of the Chesapeake and Ohio Canal Company, to be expended on the western sections.”

With this resolution on your statute books; with the just claims of a large portion of your constituents, adverted to above; with the enlightened liberality which has so uniformly characterized the Legislature of our State; and above all, the deep and abiding interest which Pennsylvania professes and feels in every measure calculated to cement and increase the bonds of union between all the members of this great confederacy; your memorialists will not permit themselves to doubt for a moment, the success of their appeal, on the present occasion. The funds therefor provided by individual and corporate public spirit, for prosecuting this splendid enterprise, are well nigh exhausted. The approaching crisis in the affairs of the company which has the immediate supervision and charge over the construction of the Chesapeake and Ohio Canal, has necessarily created an unusual sensation in the public mind throughout all the section of our common country directly concerned in the prosecution of the work, and imperatively demanding the active sympathy and efficient aid of their brethren every where. In that sensation, operating far and wide, originated the convention under whose instruction, and at whose instance, your memorialists have the honor at this time to approach the Legislature of Pennsylvania.

Your memorialists, therefore, in conclusion, *pray* that such pecuniary aid or subscription of stock to the Chesapeake and Ohio Canal, may be authorized by law, as the wisdom of the Legislature may deem proper and adequate to meet the pressing exigencies of the company; and that a joint resolution be passed by your honorable bodies, recommending this great work to the patronage of the *National Legislature*: And your memorialists, &c. &c.

WM. ROBINSON, Jr.

Chairman Committee Ball. Convention.

Allegheny county, 5th Jan. 1835.

#### CHESTER COUNTY ATHENÆUM.

At an annual meeting of the stockholders of the Chester County Athenæum, held in the reading room on 20th February, 1835, DR. ISAAC THOMAS was called to the chair, and U. V. PENNPACKER, Esq. appointed Secretary.

The Report of the Directors relating to the finances of the institution, was read and adopted.

The usual Annual Report of the Directors embracing a view of the past, present and future prospects of the Athenæum was laid before the meeting, approved of, and ordered to be published.

On motion, it was

Resolved, That the meeting go into an election for seven Directors for the ensuing year. Whereupon.

DR. WILLIAM DARLINGTON,  
DR. WILMER WORTHINGTON,  
JOHN HALL,  
HENRY FLEMING,  
WM. H. DILLINGHAM, Esq.  
WM. WILLIAMSON, Esq.  
WM. DARLINGTON, Esq.

Were duly elected.

On motion the meeting adjourned.

ISAAC THOMAS, Chairman.  
U. V. PENNPACKER, Secretary.

#### Report of the Board of Directors..

The Directors of the Chester county Athenæum, in submitting their eighth Annual Report, cannot refrain from congratulating themselves and the stockholders upon the prosperous condition of the institution. Eight

years have now elapsed since a few public spirited individuals in the borough of West Chester, conceived the idea of establishing an institution of this character, with a view to their own moral and intellectual culture, and the elevation of the literary character of the neighborhood. The project was by some considered visionary; by many its practicability was doubted; and by nearly all it was feared that we were not yet sufficiently awake to its advantages to induce us to sustain it with that firmness to which its merits entitled it; but the ardor of its friends was not thus to be extinguished. They persevered; and although during a few of the first years of its existence they had to struggle with great pecuniary and other difficulties, so as almost to revive those dormant fears for its fate, yet they now have the satisfaction to know that the institution is placed upon a firm and permanent basis. For the last few years, the Athenæum has been gradually gaining strength, and the literary prosperity of the association, by its own continued accretion, and extensive and liberal donations, has greatly increased in value. If there were any thing in its conception to cheer the almost drooping spirits of its friends, there is an hundred fold as much to animate them now; and as determined perseverance has hitherto sustained it, there can be no fear but that a proper estimate of its benefits and advantages will continue to be held by those interested in its success.

Within the past year, there has been no diminution of the interest heretofore manifested in the prosperity of the institution. It is true a stockholder, or an annual subscriber, from a change in his residence or his pursuits, occasionally ceases his attendance at the room; but we are at the same time receiving occasional accessions, which continue the actual supporters of the Athenæum at about the same number. There has been no material variation in this respect during the past year.

By reference to the Treasurer's report, it will be seen that our funds are amply sufficient for our present ordinary expenses. It must be admitted however, that an increase of money in the Treasury would be very desirable, as well to enable us to supply ourselves with additional newspapers and journals, as for the purposes of binding up our reviews and magazines which are constantly accumulating upon our shelves. It will be highly necessary to take measures to accomplish this object at an early day.

Within the year we have had the pleasure to acknowledge the receipt of many valuable donations to the Athenæum. Among those deserving our particular notice, is the regular receipt of the most of the important public documents from the Honorable David Potts, our member of Congress, to whom we have heretofore been so highly indebted for his attention to our institution. To our members of the Legislature of the last and the present session also, we are under many obligations for valuable and interesting public documents. To William H. Dillingham, Esq. we are indebted for a present of a map of the survey of the boundary line between the United States and the British colonies; and to the same gentleman for *deposits* in the Athenæum of a handsomely drawn plan for the public buildings of this county, by Thomas U. Walter, architect. We have to express our acknowledgments to Anthony Bolmar, Esq. the enterprising Principal of the West Chester Academy, for a donation of a number of volumes of French and English works, the productions of his own labors. It gives us pleasure also to notice the recent receipt of a package of books and pamphlets from our esteemed friend J. J. Barclay, Esq. of Philadelphia, one of our earliest and steadfast friends and patrons.—We may hope and trust that the same spirit which dictated such liberal donations to us from the commencement of our existence, will continue to be manifested in the cause of literature and morals; and that we shall still continue to deserve the same encouragement that has heretofore been so freely held out to us.

In the early part of the year, the board resolved to admit all the editors of the borough to the free use of the Athenæum, upon their furnishing us with their own, and such other newspapers as they could conveniently spare. The offer was accepted, and we have no hesitation in saying that we have profited largely by the measure. We have thus been liberally furnished with an additional quantity of excellent reading matter, at a very small if any additional expense. We hope the Board of Directors about to be elected, will see the propriety of continuing this advantageous arrangement.

All which is respectfully submitted.

WM. DARLINGTON, M. D. Pres't.

W. P. TOWNSEND, Sect'y.

February 20, 1835.

#### WEIGHT OF SHEEP.

The dead weight of seven sheep fed by Clinton Frame, of Westtown township, is as follows:

Five two years old of the Bakewell blood,

Number 1 weighed	140 lbs.
" 2 "	122 lbs.
" 3 "	118 lbs.
" 4 "	114 lbs.
" 5 "	198 lbs.
Average,	120 2-5 lbs.

One of the above sheep cut  $4\frac{1}{2}$  inches in the rib,  $2\frac{1}{2}$  of which was solid fat.

Two yearlings of the common blood, No 1, 100 lbs. No. 2, 94 lbs.

The following is the dead weight of thirteen sheep, fed by Jesse James, of Westtown township, Chester county, the live weight of which was published in our last paper. The tallow from one of them weighed 34 pounds.

Number 1 weighed,	155 lbs.
" 2 "	135 "
" 3 "	124 "
" 4 "	124 "
" 5 "	124 "
" 6 "	124 "
" 7 "	132 "
" 8 "	128 "
" 9 "	122 "
" 10 "	122 "
" 11 "	118 "
" 12 "	110 "
" 13 "	109 "

Average, 124 5-13 lbs.

#### THE REGISTER.

PHILADELPHIA, MARCH 21, 1835.

SHAD.—Four shad—the first taken this season in the Delaware, were in market on the 16th or 17th instant.

The business on the Schuylkill canal commenced on the 18th inst.

Printed every Saturday morning by WILLIAM F. GEDDES, No. 9 Library street.

The publication office of the Register has been removed from Franklin Place, to No. 61, in the Arcade, eastern room up stairs.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.--NO. 13.

PHILADELPHIA, MARCH 28, 1835.

No. 377.

## EDUCATION SYSTEM. REPORT

Of the Secretary of the Commonwealth and Superintendent of Common Schools, on the subject of *Common Schools*.—Read in the House of Representatives, March 3, 1835.

SECRETARY'S OFFICE, }  
Harrisburg, 2d March, 1835. }  
*To the Senate and House of Representatives of the Commonwealth of Pennsylvania.*

GENTLEMEN:—

By the seventeenth section of the act to establish a general system of education, passed on the 1st day of April, 1834,\* the Secretary of the Commonwealth is required as Superintendent of the Common Schools, to "Prepare and submit an annual report to the Legislature, containing a statement of the condition of the Common Schools, estimates and accounts of expenditures of the school moneys, plans for the improvement of the common school system, and all such matters relating to his office of Superintendent, and to the concerns of the common schools, as he shall deem it expedient to communicate." The present report must necessarily be confined to a statement of what has been done towards organizing the system created by this act, and of the difficulties that have occurred in the construction of the law, so far as they have come within the notice of the superintendent. The condition of the schools, and the cost of maintaining them, cannot be known, till reports shall be received from the inspectors, which the sixteenth section of the act requires them to make on or before the first Monday in November.

The duty enjoined by the twenty-seventh section on the Secretary of the Commonwealth, was attended to; and copies of the act were sent to the sheriff of each county in the State.

The notice required by the nineteenth section, of the share to which each division might be entitled of the appropriation of seventy-five thousand dollars, made by the State, was prepared in August last, and published, agreeably to the provisions of the law, in every county of the Commonwealth in which there was a newspaper, except Mifflin and Juniata. The county of Juniata having constituted a part of Mifflin in the year 1828, when the last enumeration of the taxables in the State was made, it was not known what number was in each. This fact having been ascertained in November, the requisite notice was then given to these divisions also.

The enumeration of 1828 being the last made under the authority of the State, was taken as the ratio by which the appropriation of seventy-five thousand dollars was apportioned among the several school divisions. The share to which each is entitled, according to this appointment, appears by the table hereto appended.

Reports of the proceedings of the delegate meetings held on the first Tuesday of November last, have been received from all the counties in the State, except Clearfield, Columbia, Greene and Montgomery. The results of these proceedings are stated in the table.

Some difficulties have arisen in the construction of

this law, from the ambiguity and obscurity of its provisions, which are thought worthy of the notice of the Legislature.

By the first section it is provided, "that every ward, township, and borough, within the several school divisions, shall each form a school district." Some of the boroughs are divided into wards. Is each ward of one of these boroughs to constitute a district? or is the whole borough included in one? In York and Reading, each ward was taken to be a district; and this seems to the superintendent to be the correct interpretation of this part of the law. In Harrisburg, which consists of 2 wards, the borough was considered as but one district.

According to the fifth section, "the appropriations made by the joint meeting shall be considered part of the authorized estimates of county expenditures, and shall be levied and collected in the usual manner."—It also provides, that to constitute a joint meeting, at least two of the county commissioners, and a majority of the delegates of the school districts in each division, shall be required." By the sixth section, if a majority of the joint meeting refuse to make appropriations for common schools, those who may have voted in the affirmative, being the minority of the delegates, are empowered to fix the amount of tax to be raised by the districts which they represent. How is this tax to be levied and collected? It is not an appropriation made by the joint meeting, for the commissioners have nothing to do with it, and therefore it does not come within the provisions of the fifth section. In this case, the districts in the minority do not constitute a school division: their delegates act independently of the representatives of the county, and without their concurrence.

It is expressly provided, in the seventh section, that sums, which the districts acting separately and independently of the divisions, shall resolve to raise for school purposes, "shall be collected as township or borough rates and levies are by law collected."

The superintendent has therefore, in answer to inquiries upon this point, stated his opinion to be, that this tax is to be collected in the same way. Some of the supervisors however, in accordance with the advice of counsel, as it is said, have refused to collect it; and in some of the counties it has been assessed, and is intended to be collected, like county rates and levies.

The seventh section provides, that, "within twenty days after such joint meeting of the delegates as aforesaid, or at such time as such joint meeting shall fix and determine, if said delegate meeting shall have determined to make an appropriation as aforesaid, the people of the several school districts shall assemble, &c.

Meetings of the people in the districts have been held at times and places appointed by the minority of the delegates, in those counties in which the joint meetings refused to make appropriations. Many of these meetings agreed to raise sums in addition to the amount which their delegates had resolved should be levied.—The language of the law does not authorize these proceedings, and the collection of these *additional sums* may be successfully resisted. This will produce great hardship in some of the districts, in which they mainly rely upon the sums they expect thus to raise for the support of their schools. All which is respectfully submitted.

JAMES FINDLAY,

Secretary of the Com. and Sup. of Common Schools.

\* See Reg. Vol. XIII. p. 235.  
VOL. XV.

TABLE REFERRED TO IN THE FOREGOING REPORT.

School Districts.						
COUNTIES.	In each county.	Accepting.	Rejecting.	Not represented	REMARKS.	
Adams,	16	7	9	\$1,235 71	\$1,195 66	One commissioner in favor and two against.
Allegheny,	28	25	3	3,017 35	6,500 00	Commissioners in favor.
Armstrong,	13	9	2	60 09	1,920 18	do. do.
Beaver,	all except	1 & 1		1,240 42	3,727 26	do. do. No. of dist's not reported
Bedford,	15	10	3	1,509 40	Equal present co. rts	Two do in favor and one against.
Bradford,	27	23	4	991 93	Double St. approp'n.	Commissioners in favor.
Berks,	34	3	30	3,007 32	1,500 00	do. did not vote.
Bucks,	30	8	17	2,975 40	Am't. not determined.	
Butler,	12	all		828 32	2,000 00	Two commissioners in favor and one against.
Chester,	44	17	27	3,015 87		Commissioners did not vote.
Comber'nd.	17	13	3	1,574 70	3,000 00	do. do.
Columbia,				1,037 92		Report not received.
Centre,	maj.			1,066 50	3,700 00	The number of districts not reported.
Clearfield,				262 94		Report not received.
Crawford,	26	all		894 36	3,500 00	
Cambria,	8	6	1	337 22	Double St. approp'n.	
Delaware,	all			1,070 93	2,200 00	The number of districts not reported.
Dauphin,	16	2	11	1,356 57	637 34	Commissioners voted against.
Erie,	23	17		845 13	1,800 00	
Franklin,	14	11		1,796 67	Double St. approp'n.	One commissioner in favor and one against.
Fayette,	maj.			1,738 30	Do do.	The number of districts not reported.
Greene,				925 90		Report not received.
Hunting'n.	16	10	6	1,476 54	5,000 00	Two commissioners present, voted against.
Indiana,	10	7	3	805 33	Am't. as for co. purp.	Commissioners voted in favor.
Juniata,	8	8	2	612 25	3,500 00	One do. in favor and one against.
Jefferson,	8	all		104 94	Double St. approp'n.	
Lancaster,	29	14	15	4,419 02	Lowest amo't that will	Commissioners voted against.
Lebanon,	9	all		1,030 29	entitle to St. approp.	
Lehigh,	14	2	11	1,273 73		Commissioners voted against.
Lucerne,	30	23	3	1,321 20		One commissioner in favor and one against.
Luzerne,	maj.			908 21	Double St. approp'n.	The number of districts not reported.
M'Kean,	all			90 50	More than do. do.	do. do. do.
Montgo'ry.				2,429 56		Report not received.
Mifflin,	6	all		625 52	4,250 00	
Mercer,	all			1,028 77	2,060 00	The number of districts not reported.
Northam'n.	19	9	10	2,176 05	Double St. approp'n.	Commissioners voted in favor.
Northum'd	11	6	5	1,055 60	½ the amo't. of co. tax.	Commissioners voted against.
Pike,	9	6		262 94	\$1,500 00	Two commissioners in favor and one against.
Perry,	10	6	3	878 43	1½ mills on the dollar.	Commissioners voted in favor.
Potter,	11	all		72,81	1,200 00	
Somerset,	12	4	8	984 56		Two commissioners present, voted against.
Susqueh'a.	21	all		764 65	Double St. approp'n.	Commissioners voted in favor.
Schuylkill,	13	4	9	800 32	Equal do.	do. do. against.
Tioga,	all			481 96	3,000 00	The number of districts not reported.
Union,	14	2	12	1,111 90	280 00	
Venango,	16	13	3	568 92	6 m. on dol. to be lev.	Commissioners voted in favor.
Warren,	all			271 19	2 m. on dol. to be lev.	
Washing'n.	23	18	5	2,397 73	4,800 00	Commissioners voted in favor.
Westmor'd.	20	10	10	1,920 77	4,650 00	One commissioner in favor and one against.
Wayne,	15	11	3	407 09	3,000 00	Commissioners voted in favor.
York,	26	7	19	2,513 27	1,300 00	do. voted against.

## CHESTER COUNTY BEEF.

The following are the weights of cattle weighed at West Chester within a few days. Oxen fed by

Brinton Jones,	2040	Hibbard Davis,	1980
	1980		1760
	1870		1585
	1740		1550
	1640	Francis Strode,	2080

Brinton Jones,	1550	Wm. Sharpless,	1900
Eara Cope,	1990		1685
	1880		

The Darby Republican, of Delaware county, of Friday last, has this article.

A FINE OX.—An ox, raised and fed in this county, by Mr. JOHN COCHRAN, passed through this place, on Thursday last, for the Philadelphia market. He was weighed on the Darby hay scales, and drew 2576 lbs.

### INAUGURAL ADDRESS

*By Rev. JOHN LUDLOW, D. D. as provost of the University of Pennsylvania. Delivered Dec. 22, 1834.*

Called to preside over the University of Pennsylvania, by the partiality of its Board of Trustees, before entering upon the discharge of my official duties, in accordance with long established usage, in such cases, I have risen to offer some remarks which the occasion suggests.

I am deeply sensible of the responsibility of the station which I am about to occupy; and it is with no little diffidence that I approach it. But I may be permitted to say, if untiring devotion to the interests of the institution can secure a successful discharge of its duties, then I flatter myself that I shall not wholly fail to meet the reasonable expectations of the confidence reposed in me. Assured of the hearty, and efficient co-operation of my distinguished associates, I rely much upon their practical wisdom; and anticipate from this union of hearts and hands in one common cause the most favorable result.

The well-being and prosperity of every literary institution will in some measure depend upon a wise and salutary government. Though government be only incidental to a higher end yet, like the scaffolding to a building, it is rendered indispensably necessary. It is easy to perceive that a government may be characterized by such sternness and severity as to create a constant disposition to resist its action, and to impair the rules of order and decorum. Nor is it less apparent that a government may be characterized by such a happy union of mildness and decision as to secure its end almost without being felt. The one may perhaps be most appropriately denominated a government of authority; the other a government of reason. We cannot hesitate in a choice between the two. The former incorporates the elements of despotism; the latter the affectionate control of parental influence. Let it not be supposed, as it sometimes seems to have been, that there is any impossibility in extending, with success, a government of so much gentleness to a collection of youth, in a literary institution. With all the disposition to indiscretion which may be occasionally manifest, at this period of life, there is a candor in the youthful bosom on which I think reliance may be confidently placed to sustain a wholesome discipline, and put to shame the individual who is bent, after every entreaty and remonstrance, to set at naught the exercise of all restraint. If education should have regard to the cultivation of the moral as well as the intellectual faculties, how much would such a government tend to inspire that high and honorable feeling, that virtuous sensibility, which constitute such prominent features in the formation of a noble character. How much would it tend to do away the impression, too common among youth when about to enter a literary institution, that they are approaching a sort of prison, in which their personal liberty is to be sacrificed; or that while they are under their immediate instructors they will be subjected to a set of masters who have not one particle of parental sympathy. Let them feel that a collegiate course deprives them of no reasonable enjoyment compatible with the object to which they are devoted—that those who are entrusted with their education have no other desire than to facilitate their improvement, and there will not be that impatience of restraint which seeks occasion to promote disorder, and to thwart in every way the exercise of government. Besides it ought to be an object of primary importance with the faculty of an institution to save every youth committed to their care in despite of all the waywardness to which any may be prone. Character is inestimable, and if it be lost in the outset, how many wounds does it open! To secure this most desirable end, I know of no influence more effectual than that of a parental character. If however it must be, notwithstanding all the mildness and for-

bearance that can be employed, here and there an instance should be found of a youth so lost to every ingenuous feeling that he cannot be retained without irreparable injury to his associates, then there should be an inflexible firmness, which on considerations should divert from making the painful sacrifice of exclusion from the Halls which are disgraced by his presence.—But even then I would not follow him with anathemas; I would leave the door open before him in the hope that this exercise of discipline might incite him, elsewhere, to redeem his character, and yet become an ornament to the community.

Intimately connected with the general government of a literary institution, is the system which may be adopted to excite a spirit of noble emulation and distinction among its pupils. It is unquestionably desirable that there should be sufficient motive to arouse to action the latent powers of the mind, and increase their strength by vigorous exercise; but it is a matter of some importance so to adjust the system as that it may operate most happily upon the whole mass of mind, which is brought under its influence. It is to be expected that there will always be a diversity of talent in every promiscuous collection of youth; and that the talents of some may be more rapidly developed than of others, even when there may be no difference in the amount of native intellect. From the well known influence of climate upon the physical and intellectual powers, this difference in the development of talent is sometimes apparent in youth of the same age gathered from different sections of our own country. From these considerations it would be manifestly wrong to expect that all should make the same improvement. It is possible therefore that a system intended to excite an emulous action may operate with too great severity; for while it may have the happiest effect upon a few, it may tend to repress the energies of the many, and in the end leave them far below the standard to which they might have attained under a less severe pressure. All that can reasonably be required of every youth is, that he should make the best improvement of the talents and advantages which he possesses. And our design should be not so much to operate upon a few of a class, who may be made to tower far above the rest, as to exert the best influence upon the respectability and distinction of the whole. The history of our literary institutions will bear me out in the fact, that those who have occupied the most prominent places in their collegiate course have not always figured with the greatest prominence in the world, while their fellows, who gave less indications of talent, have arisen to stations of commanding influence and respectability. Perhaps this may, in part, be attributed to a too great reliance of the former upon their native talents, and too little upon their efforts; yet it is sufficient to warrant the conclusion, that no youth, of even ordinary capacity, may not, with proper culture and diligence, rise to places of honor and usefulness in society. It is certain however that whatever system, calculated to excite an honorable rivalry, is adopted, much, very much, will depend upon the discretion of instructors to give it success.

Passing from these points which may be considered as incidental to a course of education, I come to the substantial part of it. In regard to education the great question to be determined seems to be, how can you make the most of mind?—or in what way can youth be most successfully trained to enjoy the greatest amount of happiness and to qualify them for the greatest usefulness in society? Much has been written in answer to this question. The consequence has been that in our own country, especially, such changes have been suggested, and such innovations have been proposed to be made in relation to the established system of education, as to have excited apprehension, in some minds, for the fate of sound and substantial literature. The spirit of the age, which is fruitful of innovation, has doubtless led to the suggestion of some extravagant notions. The

old mode of making scholars has been thought too long and tedious, and various plans have been proposed to make scholars by a shorter course. Impositions have been practised upon a too credulous community. High sounding names have been employed to give a new coloring to an old thing, and then it has been presented to the world as a wonder of the age. This desire of change in a long established system has shown itself in opposition to the study of the dead languages—an opposition which has in some instances been sanctioned by great and honored names. It does not become us to undervalue sentiments honestly entertained. It may however be said that the most distinguished champions against this part of the established system of education have themselves unconsciously furnished very conclusive evidence of the value of what they have so vehemently opposed. Without entering, here, upon the merits of the question in relation to the study of the learned languages, I will only observe, that if these languages be thoroughly taught with accompanying illustrations, of the scope and design of the several classic authors; of the various facts, historical, biographical, and mythological, which they contain; and above all with illustrations of the beautiful sentiments with which they abound, the study of them will be pleasing as well as profitable to the pupil. Taught in this manner, the teacher of languages may bring in all his varied knowledge, and lay all science under contribution to throw around his course a fascinating charm. Then all the advantages claimed for the study of these languages will be manifest; and none who regard the influence which they exert in disciplining the youthful mind, in producing a critical acquaintance with your own language, in refining the taste and forming it after the most finished models of antiquity, will consent that the study of the dead languages should ever be abolished in a finished course of education. But while I have no feeling in common with those who would entirely exclude the study of the ancient classics, I cannot but think that our own English classics have been too little regarded. I can see no reason why such monuments of genius and taste should not form a continuous part of the classical course of every English scholar. If it be conceded that Homer, Demosthenes, Virgil, Cicero, and Horace should occupy the foremost place; ought Milton, Pope, Young, Shakspeare, Addison, Burke, and Johnson to be entirely neglected? Can they exert no influence in forming a correct and finished taste—in creating a more thorough knowledge of the use of our own language? Can they claim no advantage on account of the Christian principles and Christian morals which they inculcate? And being presented in our own living language; will not their beauties for the most part, be more easily perceived and much better understood? Ought not then, the critical analysis of select parts of these classics to be closely blended with the common course of Rhetoric in our literary institutions?

I have spoken of innovations upon the established system of Education: far be it from me however in what has been said, to indicate that the course of education is not susceptible of improvement, or that no improvement has been made. Still whatever has been tested by long experience should not be hastily disturbed, or assailed with a rude hand. It is a safe criterion to judge of the value of a system of instruction which has long prevailed by the effects which it has produced. According to this rule, what has been the result? Where shall we find such scholars as are to be found in the last age? In the various branches of science which were then cultivated—in all the learned professions, they stand out in bold relief upon the pages of history. Though some men may endeavor to depreciate the system under which they received their intellectual training, yet it will doubtless be to the advantage of their literary reputation not to court a comparison with them. Whatever improvements are made in the course of instruction, let them be gradually intro-

duced, and adapted to the wants of the age. Extend the range of study with the progress and development of science—improve in every possible way the mode of teaching, and the facilities of illustrating science; but do not depart from the grand outlines of a system which has produced the most profound and illustrious scholars. It is a matter which may well be questioned, whether any radical improvement has been made in the system of education since the period of the immortal Bacon. To his inventive and philosophic mind we are indebted for the entire change which took place in the prosecution of physical and mental science. The principle of induction, which he carried into the region of matter and mind, has laid a foundation from which we cannot depart without being lost in the uncertainties of profitless speculation. He has taught us to substitute facts for fancy, and by the gradual development and analysis of the various phenomena of matter and mind, to arrive at general conclusions which are incontrovertible. This method of prosecuting science which deals in facts—truths—cannot be carried out too extensively wherever it admits of application; though it must be confessed that there is a constant tendency to depart from it. Perhaps nothing has been more prejudicial to the interests of truth and science in its various departments, than a disposition to form speculations and theories; and then, losing sight of truth, labor to bend every thing to sustain them. What a waste of intellect and of effort, which, if correctly applied, would have tended to very different results.—Hence we cannot in a system of education adhere too closely to a principle which the great philosopher has taught us. To it we are mainly indebted for those discoveries which have been made in natural science, by which the hidden laws of nature have been developed, and made subservient to the convenience, the comfort, and even the happiness of man. To it we are indebted for the analysis of mind, and the reduction of mental philosophy from a state of chaotic confusion to a system of intelligence and order.

Assuming this grand principle as the basis of a course of education, so far as it can be applied, it is matter of great importance that the subjects embraced in it should be prosecuted in the order best adapted to the capacity of the youthful mind. The first elements of knowledge are derived through the medium of the organs of sense. External objects are the first to attract attention, and to communicate ideas. Abstract subjects are among the last which engage our thoughts. Hence it is that we are so much more conversant with what passes without us, than with what takes place within us. This law of our nature requires that those sciences, or studies, which make an impression upon the organs of sense should precede those which are abstract in their nature, and require habits of abstraction in order to comprehend them. Though this it would seem must be very obvious to all, yet the law itself, in application to the course of education, has not always been kept sight of. This remark applies more to our common schools, and academies, than to our higher institutions of learning. Does it accord with this principle of mental philosophy that English Grammar should occupy the place it commonly does in our primary schools? As soon as a school-boy is able to read with some fluency, an English Grammar is one of the first books that is put into his hands. And with parents it is commonly evidence of great proficiency, and a cause of exultation, regardless of their age, that their children are studying grammar! I think you will bear me out in saying that there is not a more difficult subject to comprehend than the philosophy of language. And how can it be expected that youth, in their earlier stages of education, can understand it, when it requires of those who have come to maturity so much study and reflection. Is it, except so far as memory is concerned, little more than a waste of time? Would it not be less difficult for a youth to understand even the elements of



some of the natural sciences? Might there not a beneficial change in this respect, be made in our primary schools, if history, which is so much neglected, or even intellectual arithmetic, were substituted in the place of English Grammar? We have learned, within a few years, that children and youth have a capacity to acquire knowledge, at a much earlier period than was heretofore supposed; and we are very much indebted for the fact to the establishment of infant schools.—Have they not shown that children, at the age of five or six years, may now know what once required ten or twelve to learn? Is it not because they have been conducted upon the philosophic principle, which teaches them to call to their aid the external senses in the attainment of knowledge? It is the part of wisdom to derive instruction from every source, and if such advantage may result from a happy adaptation of the course of study to the capacity of the youthful mind, ought we not to avail ourselves of it throughout the whole training of youth, and thus by increasing the facilities of obtaining knowledge, in effect, protract the period of our existence and add to the extended usefulness of every scholar.

But if it be important to adapt a course of education to the capacity of youth, it is still more so that all the faculties of the mind should be cultivated in their proper proportions, in order that it may be made a most perfect instrument for the development of truth. However ingeniously the several parts of a piece of mechanism may be constructed, it will fail to accomplish the end for which it is intended, unless these parts are happily adjusted to move in perfect harmony.—The body can never be expected to attain that symmetry which constitutes its strength and beauty, unless its several members have their due proportion. What is true of a piece of mechanism and of the human frame, is not less so of the intellectual faculties. To secure this result, the circle of education must necessarily embrace various subjects of study calculated to call into action every power of the mind, to invigorate each one by constant exercise, while, at the same time, neither is cultivated at the expense of the other, but all are improved according to their relative importance. In conducting a course of instruction, too much attention cannot be paid to this mental cultivation and discipline. The youthful student must be excited to habits of mental activity. He must be taught how to think; how to analyse. His curiosity must be awakened, and directed in a proper channel. His ingenuity and invention must be set at work, and the field of inquiry and investigation must be thrown wide open before him, and every effort must be employed to inspire him with a relish for intellectual enjoyment. This is something very different from the mere knowledge of the text book; or loading the memory with the mere technicalities of science. It is important that a student should understand the various subjects embraced in a course of study; but it is more important that he should be brought under this system of intellectual training, that like a skilful mechanic who is perfectly acquainted with the nature and design of every instrument of his art, he may know how to use the facilities which his Creator has given him, and to apply them to the best advantage. It unfortunately happens that very many youth go forth into the world and spend half their lives before they acquire the knowledge how to study, if, indeed, they acquire it at all! How desirable for a student to have his mind so well disciplined that he may with perfect ease call up, by the law of association, every thing relating to a particular subject in the circle of his attainments. He should be like a man of business, who is so methodical in all he does, that at any moment, he can lay his hand upon any paper, upon any subject, when his attention is called to it. This discipline depends upon cultivating habits of analysis and classification. Habits, which when once formed, save no little time and labour in the attainment of knowledge, and the in-

vestigation of the various subjects which may claim his attention. Nor are they less valuable in the practical application of knowledge. By the art of analysis it is comparatively easy to mould a subject into a luminous form, so that all its parts are comprehended, almost, without an effort. This intellectual training, which a teacher should ever have in view, will give ample scope for the exercise of all his powers. And herein lies the great difference which obtains between one course of instruction and another. Here too is the point in which improvement is to be made in a course of education.—This improvement does not consist in partial modifications of this course. It is matter of minor importance, whether one author or another be adopted as a guide; the student must be taught to think for himself. I do not however mean by thinking for himself, what some seem to attach to this idea, a rejection of every thing old because it is old. By no means. This is mischievous in its tendency. It is a spirit of literary licentiousness which seeks a reputation for genius and originality by thinking as no one has ever thought before, court-singularity for the sake of notoriety. It is rather a freedom of inquiry which, while it moves onward with many step, does not disdain to draw knowledge from every source, and by new combinations of the simple elements of truth, presents them in the most powerful and attractive form.

It is, moreover, important in a course of education that it should be, as far as possible, accompanied with experiments. Here again we see the force of that principle in mental science, which teaches us to call in the aid of the senses in order to impress truth upon the mind. What would be the best course of anatomical lectures without the dissecting knife? Why do the Medical Faculty feel it to be so important to have access to our hospitals, our alms-houses, but that they may illustrate the various diseases to which the body is subjected in a living, tangible form. The natural philosopher would spend much of his learning to little or no purpose, were he not to carry out his principles by a course of experiments, which, while they teach with unerring certainty the truth, make such an impression upon the mind that it cannot easily be forgotten. Hence it becomes indispensably necessary that every literary institution should be amply furnished with an apparatus of the first order. If there be any lack, it should be immediately supplied, as indispensably necessary to the purposes of science. Nor should education be only experimental: it should be practical.—It should always be borne in mind that youth are to be educated in reference to their usefulness. There are few subjects in a course of instruction which do not suggest matter of practical application. The study of the languages, like the pages of history, may be most profitably improved. The science of mental philosophy, as it teaches the constitution and the laws of mind, enables us to determine by what laws the mind is controlled. Natural philosophy has a direct bearing, in many of its departments, upon the arts, and moral philosophy comes in at every step with its sublime sanctions to bear upon the heart, and enforce the practice of duty.

But whatever may be the course of education, however excellent in itself, this does not supersede the necessity of laborious application and diligence. When we look at the course prescribed in our Colleges, and the short period of four years in which it must be passed over, no one can expect to make himself a proficient unless by incessant toil. The student must not expect exemption from the general law, that by the sweat of his brow he is to obtain bread. The desire, so natural to man, to avoid severe and protracted labour, has, perhaps, been one cause of the disposition which prevails, to too great an extent, to shorten the prescribed path that leads up the hill of science. The idea seems rather too chimerical, notwithstanding the inventive genius of my countrymen, to suppose that

they will ever succeed in constructing a rail way up this rugged ascent, which by the help of stationary power, will wait them like the breeze towards its summit. We must be content to travel the old and beaten path, however steep and difficult. But it is not merely in order to acquire the knowledge which is to be obtained in a course of education that every student must submit to labour; it is necessary that he may form habits of industry, which he may carry with him through life. For it should be deeply impressed upon his mind that when he leaves the Halls of science, he has only just entered upon a career of honour and usefulness. The necessity of forming such habits is enforced by the temptation to which he is constantly exposed to settle down in inglorious ease. He will be in danger of restricting the extent of his reading to the many light and ephemeral productions, which are every day issuing from a most prolific press. Whatever benefit these may be to the community at large, they are not calculated to make scholars of the first class. The student must seek for something more solid and substantial. He must do more. He must endeavour, by example, to correct, what seems becoming too prevalent, a taste for light reading, and threatens even to lure away the best scholars from those good old paths, which promise the most enduring harvest of literary glory.

There is one other point connected with education, which I wish to place before you in all its importance, and as it comes more especially within the range of my department, I may be allowed to insist upon it. It is the importance of giving to every course of instruction a decidedly religious character. I do not mean sectarian; for with this I have nothing to do; nor has this in stitution. When I speak of religion, I mean Christianity as opposed to scepticism and infidelity. I do maintain that the lesson of Divinity is taught in every department of science. I do maintain that the same God who made the Universe made the Bible. I am aware, and infidels are aware of the importance of this declaration; and hence the strenuous efforts which have been made to disprove it. They well know, as we do, that if one fact in the development of science could be brought in array against the Bible, that it would form very strong, if not conclusive evidence against its pretensions to Divinity. Hence the assaults which geologists in time past have made upon the Mosaic account of the creation. They seemed, indeed, for a season to exult in a triumph over it. But has not a distinguished geologist of the French school settled the question, that of all others, the Mosaic account of the creation is the most rational, and is to be universally received?—Have not the same class of men denied the possibility of a flood of waters, by which the old world was swept away as with the besom of destruction; and have they not thence inferred the impossibility of the final catastrophe of the universe when the mighty God shall "send his ploughshare o'er creation"—when the world, and all that is therein shall be burned up. The fallacy of this inference can no longer be doubted in view of the discoveries which have been made in chemical science. Has it not demonstrated with what facility almost every thing in nature can be decomposed and made to yield an inflammable element which may explode the whole system? Has it not taught by its developments how easy it is for the Omnipotent chemist of the universe to throw the world into his laboratory and consume it in a moment? It is matter of gratulation to the friends of Revelation, that all the discoveries of science, at every step, so far from contradicting, confirm the sacred page; and we have no fears that any future discoveries will tend to a different result. The tendency of scepticism and infidelity is most unfriendly to individual, domestic, and social happiness, and to the improvement of society. "Scepticism, even in its most inoffensive form," says Dugald Stewart, "when it happens to be united to a peaceable disposition and

a benevolent heart, cannot fail to have the effect of damping every active and patriotic exertion. Convinced that truth is placed beyond the reach of the human faculties, and doubtful how far the prejudices we dispise may not be essential to the well being of society, we resolve to abandon all speculative inquiries; and, suffering ourselves to be carried directly along with the stream of popular opinions, and of fashionable manners, determine to amuse ourselves the best way we can with business or pleasure, during our short passage through this scene of illusions. But he who thinks more favourably of the human powers, and who believes that reason was given man to direct him to his duty and his happiness, will despise the suggestions of this timid philosophy; and while he is conscious that he is guided in his inquiries only by the love of truth, will rest assured that their result will be equally favourable to his own comfort and the best interests of mankind."

The importance of imbuing the mind with Christian principles is indispensable to the youth themselves.—No one can be happy who contradicts the laws of his moral nature. As well might he expect to live without food, or to thrust his hand into the fire and not be burned. The impossibility, though not apparent, is as real in the one case as in the other. The precepts of Christianity are in perfect conformity with the laws of our moral nature. Hence they can never be violated with impunity. This sentiment cannot be too deeply impressed upon our youth. They should know and feel that their honour, their happiness, their usefulness, will be promoted in as far as they live in conformity to the great end of their being. To deviate from this rule is to approach the downward road that leads to infamy and ruin. If it be important on their own account that our youth should be brought under the influence of Christian principles; is it no less so when we look at the influence which they may exert upon the destinies of their country? What is the nature and genius of our institutions? Is not the experiment here making which is to demonstrate whether man is capable of self-government or whether he is not? I do not indulge in those gloomy apprehensions which some entertain of the short-lived fate of our republic. I believe that the experiment will show that man is capable of self-government; but I feel that there is no security except in intelligence, virtue, and religion. I do feel that our literary men, who must wield the Democracy of our country—who must lead in moulding society, and giving a direction to its varied concerns, should be imbued with the spirit of Christianity. They must stand upon the rock of revelation, firm as the hills, and by their influence and example, throw their whole weight into the scale of virtue. The greatest foes to our free institutions are scepticism and infidelity; and I trust the day will never come when the youth educated in our literary institutions shall be so lost to every noble and virtuous sentiment, as to give countenance to these monsters whose proper element is discord, desolation, and death! I could say much more on this subject, but the time would fail me. I will only add, on this point, that man is an inhabitant of two worlds, and if he cannot be happy here, in contradicting the law of his creation, he can not be happy hereafter; because the same laws operating in time and in eternity, he must be thrown for ever at an immeasurable distance from the source of all happiness—God his creator.

Entertaining these general views of what belongs to a course of education, I enter upon the duties assigned me in the University of Pennsylvania. I enter upon them with an ardent devotion to its interests, and with raised hopes that, aided by such an able Faculty, and sustained by such a distinguished Board of Trustees, its collegiate department will go onward, increasing in the number of its pupils, and the sphere of its usefulness, a growing honour to the city of the illustrious Penn, and the immortal Franklin. For a series of years its medical department has sustained an unrivalled pre-emi-

nence; and why should not its collegiate department aspire after the same enviable distinction? I know, indeed, there is no monopoly in the Republic of letters, and I envy not the prosperity of any literary institution in the land; but is it not a privilege as well as duty to patronise an institution of our own? Here it is that parents, while they can exert the best influence upon the morals of their children—an influence which is beginning to be better known and valued, can at the same time have them trained in a course, which for the extent which it embraces, is not inferior to that of any institution in our country. Its advantages are open to all who will embrace them. Every class of our citizens, and those especially who cannot incur the expense of sending their sons abroad, may here, at a comparatively small expense, have them educated under their own eye. And will not our citizens avail themselves, more than they have done, of the opportunity, when they know not but from among their own offspring there may be reared up another Rittenhouse, or another Franklin? If I am commending to your patronage the University of Pennsylvania, I feel that I am pleading your own cause—the cause of every parent and child in this great and growing city. I would have every class of citizens feel that it is the legitimate nursery of their offspring, and the door through which they may be exalted to the highest honours in the republic. But with all the benefits which it is capable of conferring upon this community, it may be made still more beneficial. The only thing in the way is the want of funds; and though it may sustain itself as at present organized, it presents imperious claims to the liberality of the citizens of Philadelphia. Is it necessary to do more than to announce the fact to open the hearts and hands of a city so abundant in wealth, and not wanting in liberality? If, in my desire for the prosperity of this institution, I should appeal to you in its behalf, I flatter myself that you will need only to be told what means are necessary to realize your hopes, and ours, and they will be at once bestowed. While other institutions are even now exerting their efforts to add thousands to their funds, let us not be wanting to an institution which is, or ought to be, the pride and glory of our city. I fear I have trespassed too long upon your patience.—But allow me to say in conclusion, while so much depends upon our own exertions in sustaining this institution—while so much more can be done than has yet been done, I feel that success in our efforts must depend upon him from whom cometh down every good and perfect gift, and whose merciful regard may be entreated upon every undertaking designed to promote his glory, and the happiness of man. To him do I commend it, with all its interests, in the hope that he will deign to smile upon it, and make it a fountain whence streams shall issue to gladden our beloved country, and the church of God.

From the Catalogue of the University it appears there are in the DEPARTMENT OF ARTS—

Under graduates, viz:—

Senior Sophisters	21
Junior do	15
Sophomores	24
Freshmen	33
Total	93

Of the above are from—

Philadelphia	80
Pennsylvania	3
Delaware	3
N. Jersey	3
Maine	1
D. Columbia	1
S. Carolina	1
Canada	1

93

Medical Class—Session 1834—5,	
Matriculants	392
Viz. from—	
Alabama	9
Canada and British Provinces	2
District of Columbia	2
Delaware	8
England	1
Florida	1
Georgia	12
Ireland	1
Illinois	1
Kentucky	5
Louisiana	6
Maryland	8
Mississippi	8
Missouri	1
New England	12
New York	12
New Jersey	23
North Carolina	28
Ohio	9
Pennsylvania	48
Philadelphia	75
South Carolina	9
Tennessee	13
Venezuela	1
Virginia	87
West Indies	8
U. S. Navy and Army	2
Aggregate	392

Of which 197 are first course students, and the remainder of from 2 to 4 courses.

#### AGGREGATE.

Collegiate Department	93
Medical Department	392
Academical Department	139
Charity (English) Schools	175
Total	799

#### LETTER FROM REV. JEDEDIAH ANDREWS.

We are indebted for the following interesting letter to a gentleman of Boston, as also for the introductory notice of its author, and the occasional notes which are interspersed, tending to elucidate portions of the letter.

Boston, Feb. 24, 1835.

*Jedediah Andrews*, as appears from a genealogical list of the family, in the hands of Mr. Caleb Andrews of this city, was born, in Hingham, July 7, 1674, son of Capt. Thomas Andrews of that place, and Ruth, his wife. He was the youngest but one of 10 Children.—His great grandfather, Thos. Andrews, who died in 1640, at a very advanced age was one of the first settlers in that ancient town.

Capt. Thomas Andrews, father of Jedediah commanded a company in an expedition against Canada, in 1690, and died in that service of the small pox.—His widow, of whom her son writes in his letter to Mr. Prince, died in 1732, aged 97. *Jedediah Andrews* was an alumnus of Harvard College, of the Class of 1695. It appears from J. F. Watson's Annals of Philadelphia, Article *Churches*, that Mr. Andrews was minister of a

Presbyterian Church in 1698.\* His letter to Rev. Mr. Prince, minister of the Old South Church in Boston, was doubtless in answer to inquiries having reference to Mr. Prince's literary pursuit.—An accurate history of the country of which his *Chronological History of New England*, published in 1736, was a specimen.—It is not to the credit of that generation, that he did not receive sufficient encouragement to induce him to continue his labours, excepting in some few pages, part of a 2d volume never completed.

The genealogical list above mentioned of the *Andrews'* family, of Hingham, does not give the time of Mr. A's death;† it will probably be found in the records of the religious Society of which he was Pastor;—and is supposed, the *first Pastor*. His letter, plain, and unpretending as it is, has an interest, from the information which it gives of Philadelphia and Pennsylvania at that early period.

PHILAD'A, 8th, 14th, 1730.

Rev'd Sr.—

I rec'd yours pr Mr. Oliver, thank you for it, and take the distinct acc't you were pleased to give of yr. father, his affairs and family, as a token of respect, not doubting but that covenant blessings are entailed and secured to your family, by covenant promises, which are yea and amen, by Jesus Christ. I suppose y't you call Middleborough, is the same y't was called Plimton,‡ when I was in N. E. 21 years ago, and had occasion to be up by that country, on a visit to my brother, y't lives at Rochester, who is, now, the only brother I have left, having lost two desirable brothers, about 3 years since. One died in Aug't, at Hingham, and the other, we reckon, was lost at sea, in 7br, in the great storm y't happened at y't time; for he sailed from Boston, about 3 or 4 days before y't storm, and was never heard of since. My mother, an aged woman, lives at Hingham. She is about 96, and has her sight restored perfectly, for

\* [It is stated in Dr. Mease's "Picture of Philadelphia," page 206, "That in the autumn of 1698, the Rev. J. A. came from New England to Philadelphia—and officiated as an Independent minister. The Independents" (who were also denominated Presbyterians) "had by this time increased in numbers, and after the removal of the Baptists, continued to meet at the house on Barbadoes Lot, [where the Independents, and the Baptists under the Rev. John Watt, had worshipped for several years before at N. W. corner of Second and Chestnut] until they procured another in High street, where they erected a small house for worship in 1704, which was enlarged in 1729, about which time they adopted the presbyterial form of government."—*En. Reg.*]

† He died in 1747.—*En. Reg.*

‡ The 1st Presbyterian Church from 1701 to 1747. *En. Reg.*

¶ A mistake. Middleborough was known as a town in the Old Colony as early as 1660. Plimton a settlement between Plymouth and Middleborough, was not incorporated until 1707.

the last 26 years, and retains her understanding wonderfully, as I am informed. I am continually longing to come once more and see her, before she dies; but the journey being long, and multiplicity of business continually taking me up, I am doubtful whether I shall get the liberty to answer my desire.

The help y't was kindly afforded us, from Boston, was of singular use to us, in enlarging our house, which would not, I think, have been done, without it.—It is now in a manner, finished, and proves very favourable for enlarging our Congreg'n.\* I heartily thank you for the present of the sermons, and having perused them, think there was no need of excuses from hurry of business, &c. rather admire how, in such a hurry, and amongst so many avocations, they could be done so well, especially the Election sermon, when your family was inoculated, which, being a disputed practice, would, you know, have occasioned censure, if they hadn't done well, and must, necessarily, cause more than ordinary concern at every uncomfortable symptom. A nephew of mine, son to my eldest brother, Thomas, died of the small pox, taken that way. He was Prentice to Dr. Bulfinch,—an hopeful young man, about 19. His brother informs me he died in peace, declaring himself prepared and not afraid to die.

Such a multitude of people coming in, from Ireland, of late years,† our Congregations are multiplied. in this Province, to the number of 15 or 16, which are all, but 2 or 3, furnished with ministers. All Scotch and Irish, but 3 or 4. Besides divers new Congregations y't are forming by these new comers, we all call ourselves Presbyterians, none pretending to be called Congregational, in this Province. In the Jerseys there are some Congregat'l assemblies, that is, some of the people are inclined y't way, being originally of N. Eng'd, yet they all submit to our Presbytrys readily eno', and the ministers are all Presbyt'n, tho' mostly from N. E. There is indeed, one Congreg'n in the back pt of Newark, y't don't join with us, neither ministers nor People; besides y't, all ye rest do. There is, in the Jerseys, about a dozen Congreg'ns, but not all constantly supplied

\* Does the writer refer to the house in High street, which Watson calls the "Old Button Wood"—or to some earlier building in another part of the City occupied by the Presbyterians? [See note in the other column.]

† Dr. Holmes in his *American Annals*, copies from Anderson, the following abstract of the *new comers*, in 1729.

"English and Welsh passengers and servants,	267
Scot's servants,	43
Irish passengers and servants,	1,155
Palatine passengers,	243
Arrived at New Castle government alone, passengers and servants, chiefly from Ireland, about	4,500

Total, 6,208

(*Annals II. 123.*)

with preaching; tho' most of 'em are, and the rest getting into a settled way, as fast as they can, and some new Congreg'ns growing up there also. There is, besides, in this Province, a vast number of Palatines, and they come in still, every year. Those yt have come of late years, are, mostly, Presbyt'n, or, as they call themselves, Reformed, the Palatinate, being about three-fifths of that sort of people; they did use to come to me, for baptism for their children, and many have joined with us, in the other sacram't. They never had a minister, 'till about 9 years ago, who is a bright young man, and a fine scholar. He is, at present, absent, being gone to Holland, to get money to build a Ch'h, in this City; but they are scattered all over the country; those yt live in Town, are mostly a kind of Gibeonites, hewers of wood, &c. They are diligent, sober, frugal people, rarely charged with any misdemeanour. Many of 'em, yt live in the country and have farms, by their industry and frugal way of living, grow rich, for they can underlive the Britons, &c.\* The first comers of 'em, tho' called Palatines, because they came lastly from the country, are mostly Switzers, being drove from the Canton of Bern, for they are Baptists, and won't fight or swear. They don't slave their heads, and are many of 'em wealthy men, having got the best land in the Province. They live 60 or 70 miles off, but come frequently to Town with their waggons, laden with skins, (which belong to the Indian traders) butter, flour, &c. There are many Lutherans, and some Reformed, mixed among 'em. In other parts of the country they are, chiefly, Reformed; so that I suppose, the Presbyt'n party are as numerous as the Qua-

\* *Thomas Makin*, who performed for Pennsylvania in its early days, what *Morrit* had before done for New England, a description of the country in Latin verse, thus represents the economy and the comforts of the Pennsylvania farmers at that period, [1729.]

Despicit exoticasque dapes, vestesque superbas,

Contentus modicis vivere pace suis.

Esuriens dulces epulas depromit inemptas,

Et proprio vestis vellere texta placet.

Parva, humilisque domus, latos quæ prospicit agros,

Parta, vel emptâ, sibi sufficit atque suis.

Utilis est illi, si non opulenta supella,

Res sapiens omnes utilitate probat.

*Proud's Version.*

"He scorns exotic foods and gaudy dress,

Content to live on homely fare, in peace;

Sweet to his taste his unbought dainties are,

And his own *homespun* he delights to wear.

His lowly dwelling views his large domain,

Improv'd in part, where peace and plenty reign,

Plain furniture, but useful, he doth chuse,

And wisely values ev'ry thing for use."

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kers, or near it.\* There is lately come over a Palatine candidate of the ministry, who having applied to us at the Synod, for Ordin'n, 'tis left to 3 minist'rs to do it. He is an extraordinary person for sense and learning. We gave him a question to discuss about Justification, and he has answered it, in a whole sheet of paper, in a very notable manner. His name is John Peter Miller, and speaks Latin as readily as we do our vernacular tongue, and so does the other, Mr. Weis. The Ch'h party won't grow much, except in the Town, where there is a great Congreg'n of 'em. There are some few small Congreg'ns of 'em in the country.—Tho' there be so many sorts of Religions going on, we don't quarrel about it. We not only live peaceably, but seem to love one another.

As to civil affairs, we have a Charter, granted by Mr. Penn, which is ample enough. The assemblies are chosen yearly, (for we have one in the Province, and another in the Territories) and meet upon their own adjourn'mts. The people choose the Sheriffs and Coroners, yt is two of a sort, out of which the Govern'r (who is Penn's Lieut.) takes which he pleases. The Justices and Judges are put in by the Gov'r, in which matter he may use his own pleasure, but usually consults his Council. The Council has no pt in the Legislature, that lies only in the Representatives, and gov'r, but he still advises with his Council, which is of his own choice. Justice, among us, is usually administered impartially. The government inclines to lenity rather than severity.

In this City, we have a Mayor, 12 Aldermen, and 12 Common Council men. The Mayor is chosen, annually; all the Aldermen are Justices of the Peace, within the bounds of the City. The Mayor, some Aldermen sitting with him, holds Court 4 times a year, and tries causes, criminal but not capital, yt fall out in the City, and so fines, whips, pillories as matters are. Our laws go both to the Prop'r and Crown, for approbation. Two negatives, at home, some have thought a hardship. Tho' we have Townships all over the Country, yet the people don't make Towns, as in N. E. but settle, in a scattered way, for convenience of farming, and the Country grows mighty populous, plantations thick, for a hundred miles back. The 3 lower counties, which make the Territories, are, mostly, plain, level land, but the upper counties, which make yt pt w'ch they call the Province, is more uneven, all over the country, and abundantly free'r of stones, than N. E. There is not such abund'ce of barren land as in N. E. Almost any where, if you can get land, a plan-

\* The account of burials in Philadelphia for seven years, (1738 to 1744) given by Rev'd Dr. Holmes, in his *Annals*, confirms Mr. Andrews's conjecture.

The number of burials of Quakers, was	476
Presbyterians,	179
Baptists,	98
Swedes,	129
	406

[Total deaths in these 7 years, 3,179. See Reg. Vol. V. p. 115, deaths from 1722 to 1744.—Ed. Reg.]

tation may be made. Tho' there are some barrens too. The land is light that they call loom, and easier of tillage than in N. E. tho' I think I never see any here so strong and rich as the Necks and Islands about the Bay.\* The country is pleasant, and the upper pt of it healthy, abounds with great plenty of all necessary provisions for the life of man, and beast. As to Oldmixon's history, I never saw it,† nor never heard any thing material of it, besides what I find in Dr. Cotton Mather's history of his father's life. There was formerly, when Mr. Penn had newly begun to settle people here, an account published of the country, which I have often seen inserted in histories of America, as well as single, but I have none of 'em by me. The first European Inhabitants here, were low Dutch and Swedes, who got titles from the D. of York, which were confirmed by the Prop'r Mr. Penn. There are in this Province and the Jerseys, Swedish assemblies, Lutherans. The ministers come from Sweden, and when they have been here 11 or 12 years, they are sent for home, and others sent in their room, for they think it a kind of hardship to be here, and so they call 'em home and advance 'em. These Swedish Mission's are usually men of good learning, and good behav'r. They soon learn English, and often preach among Ch'h people in vacant places. I have been well acquainted with some of them, and wrote a certificate, lately, for one, that is going home. I have not a loadstone in possession now, having lost a good one in removing our goods, to escape a dreadful fire, yt had like to have turned us out of doors, as it did my next door neighbour, the winter before last; but I'll endeavour to get one for you; they are found about 22 miles off. I was many years ago to search for them, and Cotton Stonest for Mr. Belcher, now your Gov'r.

I had not the opportunity of the conversation with Messrs. Belcher and Oliver,‡ as I desired, for which I am much troubled. When they came to my house, I, unhappily, was out of the way, and when I went to look

\* Meaning *Boston harbour*, in early times called the *Bay*.

† Oldmixon's "British Empire in America," a work probably to which Mr. Prince referred in his inquiries, was published in 1708.

[See Oldmixon's account of Pennsylvania, in Register Vol. V. p. 161.—ED. REG.]

‡ The Magnetic Iron Stone, and the Amianthus, or Asbestos, called *Cotton Stones*, by Mr. A. are noticed by Thomas Makin, in his *Descriptio Pennsylvaniae*, among its rare productions.

*Hic lapis est Magnus, &c.*

§ The Mr. Belcher here mentioned was probably Jonathan Belcher, jr. son of Gov'r Belcher; his companion is supposed to have been Andrew Oliver, afterwards Lieutenant Gov'r of Massachusetts, or his brother Peter, who took his degree at Harvard College in that year.

for them, they were pre-engaged; so that I did but just speak to them, which troubles me more than a little; and when I expected them, and waited on purpose, they did not come, being taken up with other company, for the Gentry of the Town show'd them abundance of respect indeed, and, I hear, were exceedingly pleased with them.

Thus Sir, I think, I have, in some measure, answered yr requests, and shall be glad to understand my acc't of things has yielded you any satisfaction. If there be any thing, that you could be further informed about, touching the state and affairs of this country, I shall readily gratify you, as far as I can. This with hearty respects, is all at present, from

Yr Broth'r and serv't,

JEDEDIAH ANDREWS.

To the Rev'd

Mr. Thomas Prince,  
Minist'r at Boston,  
New England,  
These.

The long struggle in the Councils upon the Gas question terminated on the 21st instant, by the adoption of the following ordinance. Unanimously by the Select Council,—19 for and 2 against it in the Common.

#### AN ORDINANCE,

FOR THE CONSTRUCTION AND MANAGEMENT OF THE  
PHILADELPHIA GAS WORKS.

Section 1. *Be it ordained and enacted by the citizens of Philadelphia, in Select and Common Councils assembled,* That for the construction and carrying on the works hereinafter provided for, the sum of one hundred thousand dollars, to be divided into one thousand shares of one hundred dollars each, shall be raised in the following manner. A book shall be opened by the City Treasurer at such convenient place as he may designate, on the first Monday of April, 1835, and be kept open during the office hours of said Treasurer for six juridical days thereafter, in which the said Treasurer shall permit all persons of lawful age, either personally or by attorney duly authorised, to subscribe for any number of shares of the said stock on the following conditions:—

The said book shall be headed in the following manner: We, whose names are hereunto subscribed, promise to pay to the City Treasurer the sum of one hundred dollars for each share of stock set opposite to our respective names, on the days and times and in such quotas and proportions as may be fixed by the Trustees appointed according to the provisions of an Ordinance entitled an Ordinance for the construction and management of the Philadelphia Gas Works, passed the 21st day of March, 1835. The said subscriber shall pay to the City Treasurer at the time of subscribing, ten dollars on each share, and the remaining ninety dollars on each share at such times and in such proportions as shall be required by the Trustees as hereinafter provided for. Provided that if such subscriptions shall exceed one thousand shares, they shall be divided amongst the subscribers pro rata, according to their subscriptions, but no less than one share shall be allotted to any subscriber; and, Provided further, that the said trustees shall have authority on the application of

a majority of the Stockholders voting according to their respective interests, and with the consent of the Select and Common Council, to borrow any sum not exceeding 25,000 dollars, or to receive subscriptions for any additional number of shares not exceeding two hundred and fifty in the whole, if the same shall be found necessary to complete the works and put them in operation.

Sec. 2. And be it further ordained and enacted by the authority aforesaid, That when the said subscriptions are completed, and the payments made in full on each share, certificates, to be signed by the Mayor of the City, and countersigned by the City Treasurer, transferable in like manner with the Certificates of the funded debt of the City, shall be issued in the following form:—

Philadelphia This is to certify that the owner of _____ shares of the stock created by an ordinance passed the 21st day of March, 1835, for the construction and management of the Philadelphia Gas Works, for which _____ entitled to the pro rata proportion of the profit arising from said Works, to be declared according to the provisions of the fourth section of said ordinance; subject, nevertheless, to the right of the Mayor, Aldermen, and citizens of Philadelphia, at any time the Select and Common Council may deem it expedient to take possession of said works and convert the said stock into a loan, redeemable in twenty years from the date of such conversion, bearing an interest of six per cent per annum, payable half yearly on the first days of February and August, Provided, the said Mayor, Aldermen and citizens of Philadelphia, are not to be responsible to the holder of this certificate prior to such conversion for the payment of any money on account of said works, other than his, her or their proportion of the profits declared as aforesaid, and actually paid into the city treasury.	1835. is the
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Sec. 3. And be it further ordained and enacted by the authority aforesaid, That within ten days after the passage of this ordinance, the Select and Common Council shall choose by ballot twelve citizens of Philadelphia, who shall be denominated trustees of the Philadelphia Gas Works, six of said trustees to be elected by the Select Council, and six to be elected by the Common Council. As soon as said elections are completed, the clerks of Councils respectively shall divide the persons chosen by lot into three classes: the first class to serve one year, the second class to serve two years, and the third class to serve three years, or until their successors shall have been obtained, and record the result upon the minutes of council.

And annually thereafter at the last stated meeting in January, the Select and Common Council shall each respectively elect two citizens of Philadelphia to serve as trustees for the term of three years, in place of those whose terms of service shall have expired. Not more than two members of each Council shall be trustees at any time, and any vacancies that may occur shall be filled by special elections to be held by the body in whose delegation in the Board of Trustees the vacancy may exist. The said Trustees, seven of whom shall be a quorum for the transaction of business, shall meet within ten days after their election, and choose out of their own body a President, and the election of President shall take place in each succeeding year at the meeting next after the election of Trustees.

Sec. 4. And be it further ordained and enacted by the authority aforesaid, That it shall be the duty of the trustees so appointed, to proceed forthwith to construct suitable works for the manufacture of Carburetted Hydrogen Gas from bituminous coal, for the purpose of public and private illumination, and to lay pipes for its distribution through the city. The said works shall be on a scale competent to manufacture 75,000 cubic feet of Gas daily, and the arrangement of the pipes for

distribution and delivery shall be approved by the Watering Committee. The said trustees shall keep accurate accounts of their receipts and disbursements, and report the same, together with a statement of their proceedings to Councils annually in the month of January, and give such other information as may from time to time be required by the Select or Common Council. They shall semi-annually on the first days of February and August declare a dividend of the profits arising from the manufacture and sale of Gas, after deducting the rent of the Lot, the expense of manufacturing the Gas, the cost of repairs to the works, and the incidental charges of the establishment; and issue a requisition on the Mayor for the payment of said dividends to the holders of the certificates.

Sec. 5. And be it further ordained and enacted by the authority aforesaid, That the trustees aforesaid be and they are hereby vested with power necessary for the construction of the works herein provided for, and for the purpose of carrying into effect the intents of this ordinance are hereby empowered to purchase materials, make contracts, and employ such agent or agents as they may deem necessary; Provided that no contract shall be entered into or expenses incurred to exceed the amount of the subscriptions for the construction of the works, nor shall any act of the said trustees impose any liability, whatever on the Mayor, Aldermen and Councils, beyond the amount of said subscription. That no trustee, superintendent or agent of the Philadelphia Gas Works, shall be either directly or indirectly concerned or interested in any contract or agreement for doing work or labor, or furnishing or providing materials under the provisions of this ordinance. The said trustees shall from time to time prepare and submit to Councils for their approbation, rules and regulations under which the Gas may be furnished to private consumers and to the public lamps. Provided, that as many public lamps, not exceeding three hundred in the whole, as may be required by the Committee on Lighting and Watching, shall be supplied at one half the price paid by private consumers. The fixtures and metres therefor to be approved by the last mentioned Committee, to be provided without expense to this corporation.

Sec. 6. And be it further ordained and enacted by the authority aforesaid, That all moneys arising from the manufacture and sale of Gas, shall be paid into the city treasury, and be placed to the credit of the Philadelphia Gas Works; and that the Mayor of the City be and he is hereby authorised to draw warrants, which shall be charged to said Works, for such sums and at such times as may be required by the trustees aforesaid, for the fulfilment of this ordinance. Provided that all requisitions for money shall have been duly authorised by the Board of trustees and be certified by the President.

Sec. 7. And be it further ordained and enacted by the authority aforesaid, That the ground owned by the Corporation of Philadelphia, bounded east by Front street, north by Filbert street, south by High street, and west by the river Schuylkill, be, and is hereby appropriated for the location and use of the Gas Works aforesaid, for which a rent of 500 dollars per annum shall be charged to the works: Provided that the Select and Common Council may, at any time, reclaim so much of said lot, as may in the opinion of the trustees aforesaid, not be necessary for the accommodation of the works herein provided for.

**LARGE HOG.**—We inadvertently omitted to notice last week, the weight of the hog fed by Daniel T. Moore, of Danborough, and which was killed on Saturday week. He was a little over two years old, and weighed when dressed, 700. He measured 9 feet 9 inches from the end of the tail, and 6 feet 8 inches round. Mr. Moore took him to Philadelphia, and sold him for 64 cents per pound.—*Buck's Co. Int.* March 11.

## METEOROLOGICAL TABLE.

CARLISLE, 14th March, 1834.

To the Members of the Historical Society of Pennsylvania.  
Gentlemen—I send you the following Meteorological Observations of the year 1834, which you will please connect with those of 1832—as they are a continuation of the same; having used the same (Pastorellis's) Thermometer—it remaining in the same place.

Yours Respectfully, ALFRED CREIGH.

(See Reg. Vol. XIV. page 35.)

## JANUARY.

Days of the month.	9 o'clock.	12 o'clock.	3 o'clock.	Prevailing Wind.	REMARKS.
1	37°	40°	44°	W	Clear
2	34	36	36	N	Rain
3	22	23	26	NW	Clear
4	21	22	22	"	"
5	19	21	23	W	"
6	19	20	21	"	"
7	20	23	25	WSW	Cloudy
8	28	30	32	"	Clear
9	26	34	41	S	Snow
10	28	33	37	WSW	Sleet
11	36	36	37	SE	Rain
12	37	37	39	W	Clear
13	30	32	34	"	"
14	26	32	39	"	"
15	33	35	40	"	"
16	34	32	36	SE	Rain
17	38	41	43	W	Clear
18	42	47	54	N	"
19	43	43	43	W	"
20	44	45	40	N	"
21	28	30	32	W	"
22	23	27	27	"	"
23	25	27	29	NW	"
24	24	25	27	NE	Cloudy. Snow
25	22	24	26	NW	High wind
26	29	32	33	"	Cold
27	28	30	30	W	Clear
28	27	30	32	N	"
29	30	39	41	"	"
30	34	37	39	E	Cloudy
31	33	40	43	S	clear

## FEBRUARY.

1	36°	38°	39°	E	Clear
2	40	52	54	W	"
3	41	52	55	"	"
4	45	53	57	"	"
5	45	55	59	"	"
6	50	56	58	"	"
7	43	46	45	"	"
8	32	33	34	NE	Cloudy
9	35	37	40	"	"
10	42	48	53	E	Clear
11	48	53	60	W	"
12	40	41	47	W	"
13	40	45	49	SW	Cloudy
14	43	60	65	S	"
15	40	53	68	E	Rain
16	40	43	46	"	Cloudy
17	42	43	43	"	" and rain
18	43	45	47	SW	Clear and cloudy
19	40	42	43	S	"
20	42	45	47	E	"
21	44	44	47	S	"
22	48	50	55	S	"
23	54	55	56	E	Foggy and rain
24	50	50	50	E	"
25	49	48	47	W	Clear
26	35	37	44	"	"
27	36	40	49	"	"
28	38	41	53	"	"

## MARCH.

Days of the month.	9 o'clock.	12 o'clock.	3 o'clock.	Prevailing wind.	REMARKS.
1	43°	45°	47°	W	Clear
2	42	43	42	"	Cloudy
3	40	41	42	"	Clear
4	42	46	52	"	"
5	44	50	55	SW	" and cloudy
6	43	46	48	W	Clear
7	49	52	57	"	"
8	46	48	47	SW	" and rain
9	48	49	50	WNW	" & high win.
10	41	43	46	W	Clear
11	42	49	56	"	"
12	43	48	55	"	"
13	44	47	53	"	"
14	44	48	50	SWW	Cloudy
15	41	43	47	W	Showery
16	43	46	48	"	Clear
17	46	54	56	"	"
18	45	55	57	"	"
19	46	57	70	S	"
20	59	63	67	"	" & high wind
21	43	40	36	NE	Rain
22	33	37	36	N	Clear
23	41	43	44	S	"
24	41	43	45	"	"
25	40	41	40	E	Snow
26	40	43	45	W	Clear
27	45	50	52	S	"
28	50	58	61	S	"
29	53	64	66	"	"
30	40	42	44	W	"
31	40	48	52	NW	"

## APRIL.

Days of the month.	9 o'clock.	12 o'clock.	3 o'clock.	Prevailing wind.	REMARKS.
1	50°	54°	54°	S	Rain
2	52	55	56	W	Clear
3	50	55	59	"	"
4	50	55	58	"	"
5	48	52	55	"	"
6	46	48	50	E	Cloudy, rain
7	44	45	46	"	Rain
8	50	55	60	SW	Rain and clear
9	50	55	56	E	"
10	49	53	54	SE	Clear
11	50	52	55	W	"
12	50	55	62	"	"
13	52	62	70	"	"
14	64	68	72	S	"
15	64	70	72	"	"
16	65	72	74	W	"
17	66	74	78	"	"
18	55	60	62	"	"
19	50	53	53	NE	Cloudy
20	53	58	62	S	Clear
21	54	56	63	"	"
22	58	64	64	E	Cloudy
23	58	65	67	"	Showery
24	55	57	69	NW	" and hig. wi.
25	50	45	45	E	Rain
26	48	46	47	WSW	Clear
27	44	45	44	NW	" & high win.
28	52	55	58	"	Cloudy
29	52	56	60	W	Clear
30	53	56	61	"	"

(To be continued.)



## EDUCATION SYSTEM.

*Report of the Committee appointed to ascertain the number of Petitions in each county of the Commonwealth praying for the repeal or modification of the School Law; and the number remonstrating against said repeal, &c. By Mr. KERR of Allegheny. Read in the House of Representatives, March 17, 1835.*

The committee appointed to report to the House the number of petitioners in each county of the Commonwealth praying for the repeal, and the number praying for a modification of the school law, and the number remonstrating against said repeal, and also how many of said petitioners signed by making their mark, and how many names to the petitions were written by other hands than the petitioners, report:

That although the number who have petitioned for the repeal is deplorably large, yet it is but a small minority of the whole number of voters in the Commonwealth, to wit, about thirty-two thousand. Those who ask for a modification only are two thousand and eighty-four; those who have deemed it necessary to

remonstrate against the repeal, two thousand five hundred and seventy-five. The committee were pained to find among those who deem a general system of education unnecessary and ask for its repeal, sixty-six who are unable to write their own names, and who attached their signatures by making their marks; and according to the best conclusion to which the committee could arrive, more than ten out of every hundred of the petitioners' names appear to be written by other hands than their own. Whether this arose from inability to write their own names, the committee do not feel themselves called on to determine. The committee would further remark, that in most of the petitions not more than five names out of every hundred are written in English, and the great mass of them are so illegibly written as to afford the strongest evidence of the deplorable disregard so long paid by the Legislature to the constitutional injunction, to establish a general system of education. A tabular statement is herewith presented.

Resolved, That the committee be discharged from the further consideration of the subject.

COUNTIES.	For a repeal of the school law of last session.		For a modification of the law of last session.		Remonstrances against the repeal of said law.		Number who have signed by making marks.
	Number of Petitions.	Number of Petitioners.	Number of Petitions.	Number of Names.	Number of Petitions.	Number of Names.	
Mercer, . . . . .	2	207					
Somerset, . . . . .	10	610	—	—	—	—	12
Lebanon, . . . . .	22	1,664					
Butler, . . . . .	1	160					
Susquehanna, . . . . .	1	20					
Crawford, . . . . .	2	160					
Greene, . . . . .	1	91					
Armstrong, . . . . .	4	190					
Mifflin, . . . . .	2	105	—	—	1	38	
Indiana, . . . . .	3	215					
Dauphin, . . . . .	5	355					
Bedford, . . . . .	5	355	—	—	—	—	2
Juniata, . . . . .	7	450					
Columbia, . . . . .	5	344					
Schoylkill, . . . . .	14	687	—	—	4	92	1
Centre, . . . . .	4	454	—	—	—	—	1
Northampton, . . . . .	18	1,053	—	—	—	—	5
Bucks, . . . . .	38	1,625	1	2	—	—	4
Perry, . . . . .	21	803	1	26	—	—	2
Huntingdon, . . . . .			8	307	—	—	1
Lehigh, . . . . .	27	1,586					
Fayette, . . . . .	3	347	15	658			
Northumberland, . . . . .	8	402	6	331	—	—	1
Westmoreland, . . . . .	16	1,445					
Beaver, . . . . .	1	192	2	209	—	—	1
Lycoming, . . . . .	4	319					
Franklin, . . . . .	17	1,116	—	—	1	33	1
Adams, . . . . .	16	550	3	60	12	381	1
Cumberland, . . . . .	13	922	—	—	2	180	1
Venango, . . . . .	4	202					
Montgomery, . . . . .	21	2,259	—	—	—	—	3
Berks, . . . . .	63	3,674	—	—	6	283	3
Delaware, . . . . .	33	1,024	—	—	13	893	1
Union, . . . . .	24	1,479	—	—	—	—	2
Lancaster, . . . . .	82	3,322	—	—	—	—	23
York, . . . . .	17	620	—	—	3	—	1
Chester, . . . . .	40	2,261	2	67	4	165	
Washington, . . . . .	3	484	4	250			
Allegheny, . . . . .	1	146			1	355	
Cambria, . . . . .					2	124	
Eric, . . . . .			7	174			
Total, . . . . .	558	31,988	50	2,084	49	2,575	66

## EDUCATION SYSTEM.

*Report of the Minority of the Committee relative to the school law. By MR. KRAUSE, of Lebanon.*

The subscriber being in the minority of the committee appointed to report to this House the number of petitioners for a repeal, the number for a modification and the number remonstrating against the repeal of the school law—also, the number who have signed by making their mark; and how many names to the petitions were signed by other hands than the petitioners—dissents from the report of the majority for reasons which he begs leave to submit.

There is no difficulty in executing the duties imposed by the first clauses of the resolution. Perfect accuracy is attainable by carefully counting the names attached to the different petitions, and in this way the number praying for a repeal, was ascertained to be thirty one thousand nine hundred and eighty-eight, for a modification; two thousand and eighty-four, against the repeal, two thousand five hundred and seventy-five and those making their marks sixty-six.

But it is wholly impracticable in the absence of other testimony than that derived from an inspection of the names of the petitioners to determine how many of them were signed by other hands; nor does the undersigned conceive it possible to report any such imperfection in the petitions, without running the risk of doing injustice; for whether it be said that names were put to the petitions fraudulently, or by reason of inability in the petitioners to make their signatures, the effect would, in either case, be injurious to citizens of the Commonwealth. If such report should not be founded in truth, it would be gross injustice. The implication of fraud could not be avoided in such report, and that against all the petitioners, until the innocent were pointed out by name. For, establish the naked fact that signatures were transmitted to this House, not put to the petitions by those whom they designate, and although the committee may choose not to infer fraud from it, others who view the opposition to the school law as the consequence of ignorance or unreasonable passion, will not hesitate to charge fraud upon it. The same testimony makes different impressions upon men according to their feelings and prepossessions in the case. Considering, however, the fact as reported by the committee, that so large a proportion of the petitioners did not sign their own names, as evidence of inability in them to make their proper signatures, and inasmuch an argument in favor of the school law, and the objection of the subscriber to the report of the majority, is not as he conceives materially weakened. The risk of doing an injury to citizens of this Commonwealth is as great, although the injury is of smaller magnitude. The right to petition against grievances is important and valuable; and so it is estimated in the constitution. Great care should be taken that the force and effect of its exercise by the citizens, be not impaired by their agents for slight and unsatisfactory reasons, and in this case no evidence satisfactory to him was presented to the committee justifying the conclusion that any was compelled to hire his neighbor to sign his name for him.

No evidence was accessible to the committee but the petitions themselves. No fact deducible from them but a similarity between some names and the color of the ink used, could be relied on for the opinion of the majority of the committee; and that is in the first place too slight to warrant a decision against so large a number of petitioners in a matter so important, and may secondly be accounted for on reasonable grounds, in conformity with the salutary rule, that things must be taken to be right until they are shown to be wrong by adequate proof. The names between which such similarity is seen are in German characters, and it is believed, not familiar to any of the members composing the majority of the committee. Men not acquainted with

the letters of a foreign language, are not expert judges enough to discriminate very exactly in the case. But apart from this it is a notorious fact that the Germans of Pennsylvania make their signatures much more alike than the English portion of our population; they appear still more alike to men not able to write German and read German writing. The fact that names are in the same ink, merits no consideration. The petitions before us were in many instances signed at public meetings of the citizens on the subject, in great haste, and where fifty or more used the same pen and the same inkstand. Of course the signatures bear the same complexion, and all the likeness in other respects which the same pen will produce, more or less, in the hands of different but all inexperienced writers. The intelligence of the German population of this State is perhaps not sufficiently appreciated. To illustrate this, Berks, and Lebanon, which are essentially German counties, and from which the majority of the committee probably make up their opinion, may be taken as instances. The former polls about seven thousand votes, and issues from two German presses, six thousand papers to subscribers, residing, with few exceptions, within its limits; it issues from as many English presses, it is believed, one thousand papers. Lebanon county, polling about two thousand seven hundred votes, furnishes to three German papers at least two thousand subscribers, and to one English, three hundred and fifty or four hundred at most. It is questionable whether a county in the State, essentially English, can be named in which public journals are supported in so large a proportion. So that if these facts may be taken as a criterion for making an estimate on the subject, the ratio of Germans able to write their names is quite equal to the same class of our English population.

For the reasons therefore that such consequences are likely to follow a report by a committee as a fact that so many names attached to these petitions were not written by the signers, and believing that the evidence before the committee does not warrant a reasonable suspicion that any of them are of that character, the undersigned dissents from the report mentioned.

J. KRAUSE.

March 17, 1835.

#### REMONSTRANCE AGAINST OPENING ELEVENTH STREET.

*To the Honorable the Senate, and the House of Representatives of the Commonwealth of Pennsylvania, in General Assembly met.*

The Remonstrance of the Mayor, Aldermen, and Citizens of Philadelphia, by their Select and Common Councils, respectfully sheweth.

That your remonstrants have learnt with regret that application has been made to your honorable Bodies for the widening of certain streets within the County of Philadelphia, and that a Bill has been reported in one of your Bodies entitled "An act for opening Eleventh street in the County of Philadelphia. One hundred feet in width from Federal street to Passunk road and for other purposes." (H. R. No. 116.) The first provision in the bill, that which gives it its title, appears to your remonstrants very objectionable; but there is in the 4th Section, a provision far more offensive; it provides "That Shippin street from the East side of Fifth street to the West side of Eighth street be continued the width of one hundred and twenty feet" and that in the case of both streets "the damages thereby incurred be assessed and recovered according to Law" or in other words that the burthen of remunerating the owners of property on those streets, shall fall upon the County of Philadelphia.

Your remonstrants beg leave most respectfully to express their earnest conviction that this mode of Spe-

civil Legislation on the subject of the opening of particular streets in the City and Liberties of Philadelphia, far from promoting the public good, is generally attended with great inconvenience to the County, and injustice to its inhabitants. The Legislature cannot depart from the salutary provisions laid down in the acts of the 23d of April, 1804, and of the 25th of March 1805; without conferring local or partial benefits at the expense of general and universal justice. The opening of streets, or the widening of them beyond their ordinary width, by legislative enactment without an expression of opinion on the part of the Court of Quarter Sessions, or of the Commissioners of the County, or of the

Jury of the Viewage, has already occasioned an amount of expenditure, of the extent of which it is believed, that those who participated in those acts of legislation were but little aware. On referring to the accounts of the County Commissioners, published annually, it will be found that the burthens of the County of Philadelphia, are now very oppressive; the rate of taxation enormous, its increase alarming, and the amount of the County debt created within the last five years altogether by acts of special legislation almost incredible.

The following exhibits an abstract of the five last Annual Reports:

	1830	1831	1832	1833	1834
Amount of the County Tax, . . . . .	\$172,372 78	173,377 41	268,569 96	267,439 66	268,478 60
Proportion paid by the City, . . . . .	101,338 14	101,519 84	166,177 45	159,661 50	159,313 34
Do. " " Northern Liberties, . . . . .	20,914 73	20,933 58	29,743 63	29,693 37	25,780 53
Do. " " Southwark, . . . . .	9,933 57	9,960 78	13,162 42	13,110,54	15,063 87
Do. " " Moyamensing, . . . . .	3,245 05	3,220 43	5,133 20	5,341 98	5,260 47
Do. " " Passyunk, . . . . .	2,509 49	2,526 93	3,541 70	3,532 74	3,572 95
Amount of Orders drawn on the Treasury, . . . . .	161,446 53	255,685 07	468,581 44	—	909,024 98
State of County Funds, Debits, . . . . .	24,438 08	126,821 00	261,295 00	296,698 66	549,916 93
" " " Credits, . . . . .	97,629 93	147,262 94	269,941 68	170,492 85	213,039 41
Exhibiting a surplus of, . . . . .	73,191 85	20,441 94	8,616 68	—	—
And leaving a deficit of, . . . . .	—	—	—	125,605 81	336,877 54
Amount of Loans due by the County, . . . . .	20,700 00	122,000 00	161,600 00	251,300 00	475,000 00

The following are some of the principal items of Expenditure.

Public Roads, (damages and Juror's fees)	38,311 24	82,902 12	81,071 54	128,249 74	166,174 20
Bridges, . . . . .	15,188 85	17,569 88	12,438 74	44,776 51	41,334 85
Support of Prisons, . . . . .	16,700 53	18,416 98	20,218 40	25,062 71	20,263 15
House of Refuge, . . . . .	10,000 00	10,000 00	10,000 00	9,000 00	9,000 00
Courts, . . . . .	26,276 47	28,698 26	23,316 09	27,153 85	30,402 27
Board of Health, . . . . .	—	—	14,000 00	31,128 81	15,000 00
School Fund, . . . . .	41,037 96	59,372 79	38,332 08	54,800 00	52,394 10
Interest and discount, . . . . .	599 95	2,093 89	8,056 31	15,249 19	15,988 48

Thus, it appears, that in the last five years the taxes of the County have increased from \$172,372 78 to \$268,478 60; and that during the same time the loans due by the County have increased from \$20,700 to \$475,000—that instead of having a surplus of \$73,191 85, there is now a deficit of \$336,877 54.

If we would ascertain the cause of this alarming change, we need but open the Statute Book of Pennsylvania; we shall find there the various enactments by which, at the suggestion of interested individuals, but in opposition to the interests and wishes of the citizens of the county, a number of Streets have been either opened or widened at an immense expense, and without any corresponding advantages to the public. The amount of damages for public roads or streets has increased four fold in five years. From a report made to the Senate at its last session by the County Commissioners, (Journal of the Senate, 1833-4, Vol. 2d, p. 409,) it appears at that time the unsatisfied claims for damages incurred by opening a few of the Streets in the districts of Southwark and Moyamensing, were as follows:

Shippen Street,	\$61,650 00
Washington, do.	42,600 00
Prime street,	10,500 00
Christian, do.	9,836 66

\$124,586 66

All the above (besides many others of less amount) were opened by direct provisions of the Legislature

without reference to the County Court, County Commissioners, or Jury of Viewers. These expenditures were incurred in one year, while the aggregate of the taxes raised in Southwark and Moyamensing during the last five years, has been as follows:

In Southwark for 1830-31-32-33-34	\$65,233 18
" Moyamensing, " " " "	22,081 13
	\$87,314 31

When the application for a law to widen Shippen street, from Third to Fifth street, was made in 1832-3, it was stated by the friends of the measure that a committee of the owners of the property to be paid for, had ascertained that the damages would amount to but little over \$20,000, but no sooner had the law been passed than the pretensions of the land proprietors raised, and the damages were at last settled at \$62,500, or three times the estimated amount. Should the proposition to widen Shippen street from Fifth to Eighth, prove successful there is reason to believe from the value of the property and the character of the improvement upon it, that the damages thereby thrown upon the County would not fall short of \$120,000.

The object of this widening is said to be erection upon it of a market house; but your remonstrants would suggest that provision has already been made for a market house on Shippen Street from Third to Fifth; and that with the same view Eleventh street has been widened on an extent of about half a mile from Ship-

pen to Federal street, and that no person residing in the intermediate space between these two market houses, would be more than three squares off from a market—neither does it appear desirable to extend the widening of Eleventh street for half a mile further from Federal street to Passyunk road, as it is apparent that the space from Shippen to Federal street, will be ample for many years to come, and that as the population of the district increases, it will spread to the westward and require similar accommodations beyond Broad street.

Were this a bill affecting merely the interests of the district in which the improvements are to be made, the citizens of Philadelphia would be the last to reconstrue against its passage—but its advantages being confessedly confined to the immediate vicinity in which it is to operate, while it must inevitably entail upon the County at large, a great increase of debt and taxation, your remonstrants trusts they will be permitted to urge on your honorable bodies their views of the injustice and hardships which the proposed law would produce.

In conclusion your remonstrants would state that the City of Philadelphia pays about sixty per cent of the County tax, while the districts of Southwark and Moyamensing pay less than eight per cent of it.

In their report last year, the County Commissioners were induced to “suggest the propriety of no further enactments to burthen the County with any additional expenses.” In this suggestion your remonstrants fully concur, and at the same time they take leave to express a hope that, should it appear to your honorable bodies that, in a few special cases, it is desirable to extend the width of our streets beyond the fifty feet allowed by the acts of 1804 and 1805, your body will be pleased to refer the ultimate decision to the Court of Quarter Sessions, enlarging their powers, in such special cases, so that the expediency of the measure may be tested by the same process which it adopted in the case of applications to open new streets in the City and adjoining districts—and they will ever, &c.

WM. M. MEREDITH,  
Pres. Select Council.  
HENRY TROTH,  
Pres. of the Com. Council.

ATTEST.

ROBERT HARE, Jr.  
Clerk of C. C.  
LEVI HOLLINGSWORTH,  
Clerk pro tem of S. C.

#### THE INTERIOR TRADE.

We understand that during the last week, three agents from extensive commission houses, in Philadelphia visited this town and neighborhood for the purpose of obtaining consignments of flour and other produce, the important staples of our country. This is but the commencement of a series of efforts which will be made to draw all our trade to the Philadelphia market. The produce thus obtained will reach Philadelphia by way of Pittsburg and the Pennsylvania Canals. The length of the route is as follows: Wheeling to Pittsburg, by river, 97 miles; thence to Johnstown, by canal, 104 miles; thence to Hollidaysburg, by rail road, 37 miles; thence to Philadelphia, by canal, 300 miles; making the whole distance 538 miles. The expenses are, on a barrel of flour, from Wheeling to Pittsburg, say 25 cents; charges there 12½; thence to Philadelphia \$1; total \$1 37½. Time occupied by the trip 12 to 15 days.

We call the attention of Baltimore to these facts.—That city is 267 miles from Wheeling—probably by a canal and rail road route it would be 350; Philadelphia is 538; and yet, by the completion of the Pennsylvania canals and rail road from Pittsburg to Philadelphia, the latter city is able to obtain flour from Wheeling at a

cost for transportation of \$1 37½ per barrel. Now the truth may as well be told at once, for it will come out. Produce cannot be transported for this sum from here to Baltimore (or to Frederick with rail road charges added) on a turnpike, even were the whole road toll free, without loss to the carriers. The result, then, is clear, that Baltimore must lose this trade, and Philadelphia must gain it.—*Wheeling Gazette.*

#### CATTLE.

Weighed on Monday last at West Chester.

The first owned by	
John Hickman, weighed	1945
	2010
The second, owned by	
Eusebius Townsend, weighed	1965
	1915
The third owned by	
Samuel Palmer, weighed	2005
	1975
	1570
	1585
	1630
	1620
	1420
	2 years old,
The fourth, owned by	
Obed Jackson, weighed	1970
	1780

ERRATA.—We have been requested by the author of the article headed “*Historical Sketch of Ephrata*,” (which was published in the 11th No. of the Register,) to insert the following corrections—principally in the German:

Page 161, col. 1, par. 1, line 7, for <i>or</i> , read <i>and</i> .	
“ “ “ “ “ 2 “ 24, for <i>Spener</i> , read <i>Spencer</i> .	
“ “ “ “ “ 37, for <i>Schwardzenaw</i> , read <i>Schwardzenau</i> .	
162 “ “ “ “ “ 21, for <i>dens</i> , read <i>doors</i> .	
“ “ 2 of German “ 3, insert <i>dem</i> , between <i>Schatz</i> and <i>wir</i> .	
“ “ “ “ “ 5, insert <i>hir</i> , between <i>tragen</i> and <i>in</i> .	
“ “ “ “ “ 6, for <i>Leide</i> , read <i>Leiden</i> .	
“ “ “ “ “ 8, for <i>Wan</i> , read <i>Wann</i> .	
“ “ “ “ “ for <i>schwaeche</i> , read <i>schwaechen</i> .	
“ “ “ “ “ 9, for <i>Lammur</i> , read <i>Lammer</i> .	
“ “ “ “ “ 11, for <i>verbergen</i> , read <i>verbor-gen</i> .	
“ “ “ “ “ on <i>Zenobia</i> , for <i>thr</i> , read <i>ihre</i> .	
“ “ “ “ “ par. 2, line 3, for <i>abor</i> , read <i>labor</i> .	
164 “ “ “ “ “ 46 for <i>elegant</i> , read <i>eloquent</i> .	
166 “ “ “ “ “ par. 1, “ 20, for <i>Ven</i> , read <i>Von</i> .	
“ “ “ “ “ 21, for <i>wullenden</i> , read <i>wallenden</i> .	
“ “ “ “ “ 27, for <i>Theosophischin</i> , read <i>Theosophischen</i> .	
167 “ “ “ “ “ 18, for <i>sentiments</i> , read <i>sentiments</i> .	
“ “ 2 “ 2 “ 5, for <i>internal</i> , read <i>external</i> .	

Printed every Saturday morning by WILLIAM F. GEDDES, No. 9 Library street.

The publication office of the Register has been removed from Franklin Place, to No. 61, in the Arcade, eastern room up stairs.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

**VOL. XV.--NO. 14.**

**PHILADELPHIA, APRIL 4, 1835.**

**No. 378.**

## REPORT ON THE SINKING FUND.

*Annual Report of the Finance Committee on the State of the Sinking Fund.*

MR. LIPPINCOTT, Chairman.

*To the Select and Common Council:—*

The Finance Committee, in pursuance of an Ordinance of Councils, passed April 14, 1824, submit the following report of the transactions relative to the Sinking Fund, for the year ending 1st March 1835, and have annexed thereto the accounts of the City Treasurer, showing the receipts and payments during the year, together with a list of the stocks belonging to the Sinking Fund; and also an account of the different loans made to the Corporation, showing the periods when they severally become due; and in order to explain the operation of the Fund more fully, submit the following concise statement thereof:—

Balance at credit uninvested on the 1st March 1834,	\$18,862 35
Received annual appropriation of Councils, agreeably to Ordinances,	25,000 00
Received interest and dividends on stocks held by the Sinking Fund,	19,122 80
Received for premium on \$100,000 00, loaned to the Corporation on July, 1834,	6,021 50
Received for premium on \$60,000 00, loaned to the Corporation in January, 1835,	5,475 00
Received interest on money loaned to the Corporation,	1,037 15
	<b>\$75,518 80</b>

Amount invested in City loan under Ordinance March 13, 1834,	\$30,900 00
Premium on said loan,	2,317 50
Paid first instalment on 75 shares of the Philadelphia Steam Tow Boat Company,	750 00
Balance uninvested,	41,551 30
	<b>\$75,518 80</b>

The Committee would observe, that the sum of \$41,551 30, the balance of said account, herewith submitted, they contemplate investing at an early day.

The Committee, in closing this report, renew the expression of their approbation in the advantages arising from the Sinking Fund as at present established, considering it the best plan of paying the City debt as it falls due, without resorting to loans for that purpose.

All of which is respectfully submitted,

JOSHUA LIPPINCOTT,  
HENRY J. WILLIAMS,  
THOMAS DUNLAP,  
LAWRENCE LEWIS,  
JOSEPH R. CHANDLER,

*The Sinking Fund of the Mayor, Aldermen and Citizens of Philadelphia, from March 1st, 1834, to March 1st 1835.*

DR.

1834.		
July 16	To investment in City Loan, under Ordinance of March 13, 1834,	\$30,900 00
	To premium on said loan, at 7½ per cent,	2,317 50
1835.		
Feb'y 21	To cash paid first instalment on 75 shares of the Philadelphia Steam Tow Boat Company,	750 00
28	To Balance,	41,551 30
		<b>75,518 80</b>
March 11th, 1835.		-

CR.

1834.		
March 1	By balance,	18,862 35
May 1	By quarterly appropriation,	6,250 00
July 1	By 6 months' interest on \$236,600 City 5 per cents,	5,915 00
	By 6 months' interest on \$2,900 City 6 per cents,	87 00
16	By cash, premium on loan of \$60,000,	3,036 00
	By cash, premium on Loan of \$30,900	2,317 50
23	By cash, premium on loan of \$9,100,	668 00
24	By cash, 6 months' dividend on Schuylkill Permanent Bridge,	157 60
August 2	By cash, 6 months' interest on \$66,891 56 State 5 per cents,	1,672 29
	By quarterly appropriation,	6,250 00
28	By cash, 6 months' dividend on Schuylkill Navigation Company Stock,	1,125 00
Nov'r. 1	By quarterly appropriation,	6,250 00
1835.		
Jan'y. 1	By 6 months' interest on \$267,500 City 5 per cents, deducting 15 days' interest on \$30,900,	6,624 01
	By 6 months' interest on \$2,900 City 6 per cent,	87 00
10	By cash, premium on loan of \$55,000,	5,012 50
13	By cash, premium on loan of \$5,000,	462 50
Feb'y. 2	By quarterly appropriation,	6,250 00

February	4	By cash, 6 months' dividend on Schuylkill Permanent Bridge,	157 60
	13	By cash, 6 months' dividend on Schuylkill Navigation Company Stock,	1,625 00
	14	By cash, 6 months' interest on \$66,891 56 State 5 per cents,	1,672 30
	28	By interest on money used by the Corporation for city purposes,	1,037 15
			<u>75,518 80</u>
March		By Balance,	41,551 30

Errors Excepted.

CORNELIUS STEVENSON,  
City Treasurer.

An Account of the different Loans to the Mayor, Aldermen and Citizens of Philadelphia, showing their respective amounts, the period of their becoming due, and annual interest thereon.

Amount of Loans at 5 per cent.	Amount of Loans at 6 per cent.	When payable.	Amount of Interest at 5 per cent.	Amount of Interest at 6 per cent.	Total Interest.
Dollars. C.	Dollars. C.		Dollars. C.	Dollars. C.	Dollars. C.
26,400 00		January 1, 1838	1320 00		1320 00
10,000 00		" " 1839	500 00		500 00
	290,100 00	" " 1840		17,406 00	17,406 00
	10,000 00	July 1, 1840		600 00	600 00
91,900 00		January 1, 1840	4395 00		4395 00
33,500 00		" " 1843	1675 00		1675 00
	50,000 00	July 1, 1845		3000 00	3000 00
26,000 00		" " 1845	1300 00		1300 00
	70,000 00	January 1, 1846		4200 00	4200 00
386,000 00		" " 1846	19,300 00		19,300 00
30,000 00		July 1, 1848	1500 00		1500 00
57,600 00		" " 1850	2880 00		2880 00
68,600 00		January 1, 1851	3400 00		3400 00
	25,000 00	" " 1852		1500 00	1500 00
30,000 00		" " 1852	1500 00		1500 00
	25,000 00	" " 1853		1500 00	1500 00
25,000 00		" " 1854	1250 00		1250 00
26,000 00		November 1, 1854	1300 00		1300 00
23,000 00		January 1, 1855	1150 00		1150 00
18,500 00		April 1, 1855	925 00		925 00
10,000 00		July 1, 1855	500 00		500 00
53,000 00		" " 1856	2750 00		2750 00
67,000 00		January 1, 1857	3350 00		3350 00
50,000 00		July 1, 1857	2500 00		2500 00
83,500 00		" " 1858	4175 00		4175 00
32,400 00		January 1, 1859	1620 00		1620 00
55,000 00		July 1, 1859	2750 00		2750 00
67,500 00		" " 1860	3375 00		3375 00
36,200 00		January 1, 1861	1810 00		1810 00
37,000 00		" " 1862	1850 00		1850 00
60,000 00		July 1, 1862	3000 00		3000 00
35,000 00		January 1, 1863	1750 00		1750 00
100,000 00		July 1, 1864	5000 00		5000 00
100,000 00		" " 1865	5000 00		5000 00
100,000 00		" " 1866	5000 00		5000 00
60,000 00		January 1, 1867	3000 00		3000 00
<u>1,800,500 00</u>	<u>470,100 00</u>		<u>90,025 00</u>	<u>28,206 00</u>	<u>118,231 00</u>
1,800,500 00	At 5 per cent. per annum,				90,025 00
470,100 00	At 6 " " "				28,206 00
					<u>Total Interest, 118,231 00</u>

*Certificates of Stock belonging to the Sinking Fund of the City of Philadelphia, March 1st, 1835.*

By whom issued.	Interest paid to.	Redeemable.	Amount.	Total.
City five per cents.	January 1st, 1835,	January 1st, 1839	\$10,000 00	\$
do do	do do	do do 1840	300 00	
City six per cents.	do do	do "	2,900 00	
City five per cents.	do do	July 1st, 1845	26,000 00	
do do	do do	January 1st, 1846	16,200 00	
do do	do do	July 1st, 1848	9,000 00	
do do	do do	do 1850	17,600 00	
do do	do do	January 1st, 1851	20,000 00	
do do	do do	do 1855	4,200 00	
do do	do do	April 1st, 1855	18,500 00	
do do	do do	July 1st, 1855	10,000 00	
do do	do do	do 1856	25,000 00	
do do	do do	January 1st, 1857	2,300 00	
do do	do do	do "	12,000 00	
do do	do do	July 1st, 1858	13,500 00	
do do	do do	do "	2,800 00	
do do	do do	do 1859	34,200 00	
do do	do do	January 1st, 1863	15,000 00	
do do	do do	July 1st, 1866	30,900 00	270,400 00
State five per cents.	February, 1st, 1835,	June 1st, 1841	1,106 37	
do do	do do	do "	5,673 46	
do do	do do	Decemb'r 1st, 1846	10,519 31	
do do	do do	do 1850	22,000 00	
do do	do do	do 1853	15,500 00	
do do	do do	do 1854	12,092 42	
Schuylkill Navigation Com- pany,	February, 1835,	500 shares stock	25,000 00	66,891 56
Schuylkill Permanent Bridge,	January, 1835,	394 shares stock	3,940 00	
West Philadelphia Canal, Philadelphia Steam Tow Boat Company,	75 shares, first instalments paid,	100 shares stock	5,000 00	
			750 00	
				34,690 00
				371,981 56

### EDUCATION AND CRIME.

Remarks on the relation between Education and Crime, in a letter to the Right Rev. WILLIAM WHITE, D. D. President of the Philadelphia Society for alleviating the Miseries of Public Prisons. By FRANCIS LIEBER, L. L. D. member of the Society.

Right Reverend Sir,

The office which you hold as the President of our Society, and the active interest which you have taken for a long series of years, in all matters connected with the improvement of prisons and punishment, as well as public instruction, have induced me to address to you the following remarks on a subject of vital importance to society. I am well aware that they touch upon a few points only, of this vast and grave subject, and that even these few points have not been as fully discussed, as a thorough and systematic inquiry would demand; yet I feel assured that you will receive them with that interest, which we grant even to the weakest effort, if calculated to shed some light upon a great subject, and with that indulgence, for which a sincere desire to add our mite to a good cause, may always hope at the hands of true wisdom and long experience.

In the British House of Lords as well as Commons, it has been stated that education is far from causing a decrease of crime, and the United States have been adduced as instances of this pretended fact. In one case it has been asserted, that official information had been obtained from the city of New York, which would

amply prove it. On the other hand, some remarks of Messrs. de Beaumont and de Tocqueville, contained in their work on the Penitentiary System in the United States, on the apparent increase of crime in the State of Connecticut, have been referred to, as equally confirming the statement, which, if true, would disappoint the promoters of public instruction, in one of their fondest hopes.

It appeared to me that, though many individuals would be inclined to dismiss these assertions without further consideration, since long experience has convinced them of a different result, it would nevertheless be desirable that a convincing statement to the contrary should be given to the public, both here and in Europe, if we are at all able to do so. The assertions are serious; the consequences which their truth would involve, of an alarming character; the impression which they might produce, very obnoxious in an age, when in many countries, greater efforts are making to establish general education, than at any previous period, and when, on the other hand, the results at which some of the most distinguished and acute statistical writers have arrived, apparently corroborate the above unfavorable remarks. I was in hopes that some writer, more fitted for the task, and more at leisure than myself, would offer his observations upon this subject, and have, therefore, delayed giving my views until now, though, in the mean time, I did not remain idle as to the collection of materials, should the task eventually fall upon me. As no one as yet has given, as far as I know his views, I venture to lay mine before you, requesting you

however, at the same time, not to consider the following remarks as intended to form a treatise on the important question before us. A labor of this kind would require more leisure than I can possibly command.—All I have proposed to myself is, to offer some general views, which may present the various points, constituting the subject which occupies our attention, with greater clearness, and a few statistical facts of high authority to show, as I believe I shall be able to do, the fallacy of the cited statements.\*

The difference of opinion respecting the effect of education upon the decrease of crime, is owing in my opinion, in no slight degree, to a vagueness of expression, so common whenever a subject of great importance begins to attract general attention. Even to words, apparently of very simple import, a different meaning is attached, by different individuals; or the ideas which they are intended to convey, are indistinct. Thus, I doubt very much whether many writers connect a perfectly clear and definite idea with an expression so simple, as that of decrease or increase of crime. The terms, education, instruction, knowledge, and several others, are used still more vaguely, and not unfrequently, in utter confusion. In order, therefore, to proceed with any degree of clearness, it will be proper to discern between knowledge, instruction, education and civilization.

By instruction, we understand the imparting of knowledge; but I may be permitted to use the term for brevity sake, in the subsequent lines, for public instruction, or the imparting of knowledge in schools; and, more especially, in schools which are established according to some general system, and strive to diffuse knowledge among those classes which are least able to procure instruction by private means. Education has a much more comprehensive meaning, and designates the cultivation of the moral, mental and physical faculties of the young, it includes, therefore, instruction.—By civilization, I understand the cultivation of all our powers, and endowments, and whatever results from this cultivation, as well as the cultivation of all those ideas which have any connection with man's existence, as a member of civil society, or as a social being in general, and the adorning of his mind.

According to this definition, I take it for granted, that man was destined for civilization. If there be any who deny this position, who, perhaps, pretend with some writers of the last century, that man is happiest and purest, in a state of absence of civilization, I do not consider this the place to refute their opinion. An inquiry of the kind would lead us to a philosophical investigation into the first principles of human society, and the elements of the human mind itself.

If man were not destined to remain for ever stationary in a savage state, or, which amounts to the same thing, to live forever without society, he was destined to move on from one generation to another, to acquire, to discover, and to add experience to experience. A medium between the two states cannot be imagined.—Man must either be inactive, or once the impetus given, he must move on from one change to another. His destiny is civilization, and civilization is his truly

natural state, because in it alone he develops that nature which God has given to his mind. Let us suppose, however, this were not the case; nothing essentially would be altered, with regard to the whole European race, since we find it already in this state of progress from knowledge to knowledge, from acquirement to acquirement, and from discovery to discovery; and surely there can be no person, who pretends to say, that a retrograde movement up to the first simplicity be possible! Even if we disagree as to the final effects of civilization, in regard to man's happiness or virtue; with us it would be now too late for any thing else but the progress toward farther perfection.

An author of the last century, who has given to the public several treatises of the soundest character, gravely discusses in one of his papers the question, whether it be wise to promote the improvement of roads, and internal communications of all kinds, and actually comes to the conclusion, that it is wiser for a government not to make the roads too easy. As one of his reasons, he states that the same roads which serve for a brisk internal intercourse, will also serve the enemy, in times of war, as an easier means of conquest. Now, this seems to me, precisely a case in point. Even if all the objections against good and many roads had been founded, a ruler would, nevertheless, have acted very unwisely and in a way that must have become very injurious to his country, had he neglected to promote internal communication. Whatever may be the accidental or secondary results of civilization, it seems to me, that no choice is left any longer to the European race.

The first question now, which offers itself in the course of our inquiry is, does civilization promote crime?

That civilization itself, as defined above, cannot be said to promote crime, seems clear; yet I am not desirous of weighing words, and willingly admit that an increased number of crimes will generally be connected, with a state of increased civilization, simply because civilization multiplies, with every advancing step, the opportunities for the application of man's activity, and therefore, the opportunities for its abuse. It multiplies the desires and wants of man, which is in fact one of the most desirable effects of civilization; but along with them, it multiplies disappointment, and will always, with some individuals, create the desire of gratifying these wants by any means, whether honest or dishonest.

When men live upon the simplest food which nature offers, without the assistance of human activity, and dress in a style of corresponding simplicity, very few wants, and consequently few disappointments—few desires, and consequently few wicked desires can exist.\* The crimes which an Esquimaux can possibly commit, can be but few in number: on the other hand, what would have become of mankind without the art of writing? Each generation would have remained in insulated barbarity, and a gradual development of morals could hardly have taken place. Where would we be without a system of credit? Nations never could have become united by commercial intercourse, commerce would have remained in its slow and confined incipient stage; knowledge would not have extended far beyond the limited theatre of human activity, as we find it in antiquity. Yet, without the art of writing, and without the modern system of commercial credit, mankind would have been spared two of the most numerous classes of crime—fraud and forgery. We all know that private property forms one of the surest founda-

\* Some highly interesting facts relating to the subject in question, with reference to foreign nations, are contained in the late numbers of the *Annals of Penitentiaries*, &c. by Dr. N. H. Julius, a gentleman, whose praiseworthy zeal and great ability in the promotion of sound prison discipline, and institutions of a charitable character, are well known to all who have occupied themselves with the improvement of prisons. He is now in this country, sent by the Prussian government, to inspect our penitentiaries, and was unanimously requested, at a meeting of our society, to add a note to the present remarks, on the relation between education and crime in Prussia.

\* Among others, Archbishop Whately, has treated of the supposed morality of uncivilized tribes, in his *Introductory Lectures on Political Economy*, (London, 1831,) with that calm and impartial reflection which pervades the whole work.



tions and we should be freed from a very great number of crimes now committed. No weed grows on a barren rock indeed, but no grain either.

There are various other causes why the number of crimes is increased with advancing civilization. One of the most numerous divisions of crime, in all reports, to whatever nation of the European race they may relate, is *Burglary*; but burglary can be committed frequently in those countries only, the inhabitants of which feel comparatively secure. A castle of the middle ages could not be easily robbed; and a Turk hides his treasures under the ground, or carries them in his belt, and sleeps with them. Burglary, therefore, is perhaps not very frequent in that country, but should we be justified in concluding from this fact, that the Turks, as a people, are more moral or less prone to crime than ourselves?

The mere absence of crime, therefore, is neither a proof of a state of morality—for it may originate from very inauspicious causes—nor is the increase of crime of itself a proof of increased degeneracy.

If I have granted that civilization multiplies the opportunities of crime, (in a moral way, as, undoubtedly, it increases physically the variety of diseases, though not mortality,) it will be admitted on the other hand, that, generally speaking, a universal attention to public instruction is the result of a general progress of civilization, which seldom fails to cause, at the same time, two things: first, as I have already stated, multiplied opportunity for crime, and secondly an improved state of the administration of justice, as well as of the police which detects the deviations from the law. I believe it would be difficult to imagine a government which watches with great zeal over public instruction, and promotes it throughout the country, without directing a proportionate attention to the other branches of administration. Thus it happens that very frequently the introduction of a general school system is accompanied by an increased number of convictions in the courts of justice; and observers of this bare fact, who do not penetrate into the true causes of this phenomenon, conclude from the frequent appearing together of improved school systems, and an increased number of convictions, that one is the cause of the other, or that, at all events, the former does not effect a decrease of crime. But in order to ascertain the true effect of universal instruction, we must guard ourselves against rash conclusions, and take for example, countries of a large extent, in which universal instruction has been established for a series of years, such as Prussia, rather than those in which no thorough effect can as yet be expected, or which are so small that casual occurrences, entirely foreign to the amount of criminality in the community, may essentially disturb the usual proportion of crime and population.

It is evident that education, as defined above, cannot possibly promote crime; except a man be so bold as to assert that man's nature is so thoroughly bad, that in whatever way it be cultivated, if cultivated at all, it shoots forth the germs of its seeds of corruption—a view which would be repugnant to our most sacred conceptions of the goodness as well as wisdom of our Creator.

But the question is, whether universal instruction is conducive to a decrease of crime. What is meant by public instruction? I believe, if used without further designation, we understand by the expressions of "universal education," or "public instruction," most frequently the universal instruction in the various elementary branches of knowledge, or, to speak with more precision, reading, writing, arithmetic, a fair knowledge of our vernacular tongue, geography, and some knowledge of history—together with the principles of religion and morality.

That domestic education—the rearing of the young in sound morality, the fear of God; and with the all-important example of virtue in their parents before

their eyes—is of vital importance to every society, and can never be supplanted by any general school system, however wisely it may be contrived, appears to me so evident, that it is unnecessary to dwell upon this point. Suppose, however, domestic education in general, or with large classes, to be bad, and thus not only to continue from generation to generation, but, as there is nowhere a mental or moral standing still, to grow worse and worse, how shall we begin to correct so dangerous a state of things? The school would naturally be one of the readiest means gradually to introduce a better one. If the moral domestic education be not bad, instruction is not less necessary. I do not treat here of the general necessity of the knowledge of reading and writing, which our religion makes as indispensable as our state of industry and politics, but merely of the effect of general instruction upon crime, or, in other words, its moral effect.

Knowledge in itself is neither good nor bad; it has no moral character of its own, and in the translation of the work of Messrs. de Beaumont and Tocqueville, which I have already mentioned, I have said: "In this sense, knowledge is, in itself, in most cases, neither good nor bad; arithmetic will assist a defaulter, as much as an industrious man who works for his family, as a knife may serve the murderer, as well as him who cuts a piece of bread with it for a crippled beggar; just as the sun lends his light to crime as to virtue." But if we come to speak of public instruction knowledge does not retain so entirely an indifferent character.

It has been often remarked, that instruction, without the careful cultivation of the heart and religious instruction, leads to moral mischief, rather than to good effects. This is undoubtedly true, but in practice the remark applies more, I believe, to schools of a higher character than to what is called a general or popular school system. Times have existed, when the religious cultivation of the heart—I do not only speak of religious instruction—was greatly neglected in schools where the sciences were taught with peculiar success. But this disproportion does not so often exist in elementary schools, such as are established by a general school system, for all the classes in less favored situations. I believe there is hardly a school, even the meanest, in which the child does not receive some moral instruction, were it but in a secondary way. A teacher cannot help enforcing some moral rules, by way of keeping order in his school room; nor can the lessons which the children have to read and to learn, remain without instilling some moral precepts into the mind, or disposing it better for the reception of moral and religious views. Secondly, there is in all knowledge, even the most indifferent as to moral effect, for instance arithmetic, a softening power, which renders the mind more pliable; and however inferior it may be in itself, it forms one more link which connects the individual with the society in which he lives. But the more we can cultivate this feeling of our being linked to a society of moral beings and to a nation, which is not of to-day, and in which we have to perform our duties as every one else, and the more we can prevent the future growth of a feeling of separation from society, or, with which in fact, this feeling often ends in its natural progress, of opposition to the rest of society; the more we shall also prevent the various acts of selfishness, of absorbing egotism—of crime. It is for this reason, among others, that the instruction of our political duties ought to form a branch of instruction in all schools. Let us teach and convince every one that he forms an integral part of the community, upon the faithful performance of whose duties its welfare partially depends, and we shall increase his self-esteem, and thereby afford him one of the best preservatives against crime.

Thirdly, there are no individuals more exposed to crime, than the ignorant, in a civilized community: or, in other words, those individuals who are touched by

the wants and desires of civilization, or by the effects of general refinement, without being actually within the bosom of civilization.

It is on this latter point, that I greatly rest my opinion of the necessity of universal education with the European race. Civilization exists with us; we cannot stop it, even were we desirous of doing so; and the outward effects of civilization without knowledge, is the greatest bane that can befall any class or individual. Ignorance without civilization is no peculiar source of crime; ignorance with civilization, is an abounding source of crime; both, because it lessens the means of subsistence, and lowers the individual in the general and his own esteem—it severs him from the instructed and educated. Instances are afforded to us in the lowest, most ignorant, and destitute classes in all large cities, or in some frontier tribes, who receive certain views and notions of civilization, and yet live without education and instruction.

We have arrived at a state of things in which no individual, who cannot read, is actually, in most respects, excluded from the great sphere of civilization, which was not always the case, for instance, in antiquity; and whoever is thus excluded from the general course of civilization, is more exposed to misery, and more liable to be drawn into the snares of crime, than others, who, as I have stated, are more firmly linked to society, upon whom shame, therefore, has a greater power, and who find it easier to gain a livelihood in an honest way.

That there are educated people among the convicts of all countries, is a fact which does in no degree invalidate what I have said. I even allow that some have become criminals, who, without a certain knowledge, would not have committed the crime which brought them to ruin. So have persons of a more acute sense of shame, or of a more generous heart than others, sometimes become criminals; while, without these livelier feelings, they would have given the law no opportunity of punishing them.

The best preservatives against crime will always be a well trained mind, early application, and industrious habits, together with good example. There is, I believe, no person who has had an opportunity of various and thorough observation of criminals, who will not agree with me on this point, and it is easy to judge how much a sound school education contributes to a regular training of the youthful mind.

That a universal school system ought never to be wanting in a proper instruction in morals and the cultivation of religious feelings, as well as in instruction in political virtue and morality, is as true as that no system of general education will produce all the good effects which it ought to produce, without proper care being taken for the education of teachers. These are truths acknowledged in those countries where public instruction, has most prospered. But there are so many subjects of high interest connected with public instruction, that I should exceed the limits within which I must confine these observations, were I even but briefly to touch upon them.

All I have stated so far is as yet but general assertion, however plausible it may appear. How are we then to test its truth? By comparing the proportion between crime and population, since public instruction has been established in a given country, to that which before existed? I have already shown the fallacy of this test in most cases; and I must extend my remark. The increase of crime, or in other words, the increase of indictments, (because most generally, some crime has been committed by some one, where there is an indictment) is unfitted to serve as test of the increased criminality of a community, if we are not enabled, by a number of concurrent statements, to judge more precisely of the case. Sometimes the police has become more vigilant, sometimes the laws have been made more proportionate to the crime, and the judges are more willing to convict; sometimes a great influx of destitute

persons has taken place, at others public attention has been roused, and directed to certain crimes until then neglected; an army may have been disbanded: a winter have been peculiarly severe, a famine may have existed, money transactions may have offered new opportunities, &c. in short, a number of causes, some of which are continually exercising their influence upon mankind, may have existed, without the least connection with public instruction; nay, the latter may have continued to exercise its beneficial influence during the whole time that crime was increasing, and may actually have prevented it from still greater increase.

It has been stated in the British House of Commons, as I remarked above, that official information had been obtained, showing that public instruction in the state of New York, had by no means realized the hopes of the public, as to its influence upon the decrease of crime, and that in the city of New York, crime had rapidly increased. I neither know how true the statement was, as to its being obtained from an official person, nor whether the fact is true, as to the increase of crime in the city of New York. With regard to the state, it is not true, if dependence can be placed upon official documents. But I consider it very possible that crime has of late increased in the city of New York, for various reasons: First, New York is fast increasing, and has to bear with the advantages of large cities, also their evils, among which the frequency of certain crimes always will be found. Secondly, the more New York is enlarged, the more activity of all kinds is there, and consequently, the opportunity for a number of crimes, especially as she is a large seaport, to which always a number of homeless adventurers will resort.—Thirdly, its rapid intercourse with Europe has much increased, and with it the importation of a class of criminals who, according to their skill and finesse, may be termed a superior class. Fourthly, there has been of late, such an unprecedented influx of destitute emigrants and actual paupers, from foreign countries, that they alone would easily account for a great increase of vagrancy and crime. The report\* by a committee appointed by the city corporation, for the purpose of inquiring into this serious subject, exposes frightful abuses of the facility with which emigrants may, according to the present laws, settle among us, whether willing and able to support themselves or not. The almshouses have been filled with foreign paupers, and it can be easily imagined how many, either driven by want, or already trained in vice and crime, do not proceed to the almshouse, but to the penitentiaries.

The remark of Messrs. de Beaumont and de Tocqueville, which has been referred to on the floor of the British Parliament, as corroborating the fact, that universal instruction does not tend to decrease the number of crimes, is made by those gentlemen, in a passage of their work, in which they speak of the increase of crime in the State of Connecticut—a State which has fostered general education with at least as much zeal as any other State in the Union.

I have given some explanatory notes of this fact so startling, at first glance, in my translation of the valuable work of those gentlemen, and will only add here, that according to a letter sent me by Mr. Pillsbury, warden of the Connecticut State Prison, convictions have diminished considerably of late in that State.—When the two French commissioners were here, the prison discipline of Connecticut had just been amended, or, rather, entirely re-fashioned, and juries as well as judges were much more willing to let the law take its full and unchecked course, than before this reformation of the State prison, when, in fact, the prisoners were in a deplorable situation. Since the commissioners, however, were here, no essential change, either of the law or prison discipline, has taken place, to my knowledge, and a decrease of convictions, would au-

\* It is dated Sept. 29, 1834. Document No. 20.

thorize us to conclude, at any rate, that crime has not gone on increasing in that State.

Whether crime in our Union, has in general, of late, increased or not, I am not able to say. If impressions in matters of this kind were worthy any thing, I would say, that my impression is, that certain crimes, more especially murder, have either increased, or it has become more common with editors of newspapers to mention the details of every murder, in whatever quarter of the Union it may have been committed. Wherever the truth may lie, certain it is that this ready reception of accounts of atrocious deeds, is pernicious in a great many respects.—It satisfies one of the worst cravings of the human mind, and affects it in turn, in the same way in which physical stimulants and exciting liquors satisfy, and, in turn, ruin the body; it has a tendency to render the reader callous, and it has a positive and evil effect upon criminally disposed persons. The power of imitation is incalculable, universal, and often operates by imperceptible degrees. Our newspapers ought, certainly, not to be silent on the various crimes, which are committed, for it is equally important that the true state of things be known, but it strikes me, that it would be both beneficial to the people at large, and becoming to the vocation of editors, were they to state but the simple facts of atrocious crimes, and leave their detailed accounts to those papers which avowedly collect the statements of misdeeds, and appear stamped on their face in a way, which makes every honorable reader flee them. It would be certainly a wise measure if the editors of some of our most respectable papers would set the example, and agree to abstain in future from publishing detailed accounts of barbarous crimes.

One of the most active causes in producing crime in our country, is intemperance. An immense majority of all murders are either committed during intoxication, or in consequence of quarrels or misery brought on by intemperance. And if crimes of an atrocious nature have increased of late, it will probably be found, by minute inquiry, that it is in a great measure owing to the increase of intemperance, which some years ago took place, and which is now showing its melancholy effects on the intemperate themselves, as well as on those who, in the mean time, have grown up with such pernicious examples before them.

Though this Letter be not the precise place for the following remark, I nevertheless cannot refrain from making it, since it seems to me of the greatest importance that universal attention be directed to the subject; namely, the immoderate use of opium in various shapes, chiefly by way of laudanum, in families, and especially with infants, without the advice of proper physicians. My inquiries into the subject have led me to the conviction, that innumerable parents create in their children that diseased craving for stimulants, which, with so many individuals, ends in open and violent intemperance, and with many more, in a constant use of ardent spirits, not much less injurious in its consequence. The united efforts of medical gentlemen, as of all those who are in the habit of instructing the people on important points, might produce a great change toward the better.\*

Intemperance, however, which on all hands is admitted as the most fruitful source of crime in our country—and should there be any one who doubts it, let him look at the convincing statements in the letters which I shall append to these lines—will be certainly counteracted in a degree by universally spread education, for the reasons already mentioned; namely, because it trains and regulates the mind, connects the individual with stronger links to society, informs him in regard to his

duties toward the Creator, the society he lives in, and toward himself and his family, and assists in producing self-respect.

The facts which have lately appeared from the inquiries instituted in England as to the extent and consequences of intemperance in that country, the statements collected by Mr. Casper, as to intemperance in Prussia, and many details given to the public by Mr. Quetelet, with regard to intemperance in France, show that the remark I have just made is also applicable to those countries.

But is there no test, then, by which we may ascertain whether universal education tends to prevent crime, or whether ignorance promotes it? It seems to me that there is a means by which we may solve this question to the satisfaction of every fair inquirer, namely, by ascertaining the degree of education which every convict has obtained. If we should find, that in a country in which few individuals grow up without some school instruction, an immense majority of convicts are men who have not received a fair school education, if thus ignorance almost accompanies crime, and if, at the same time, it is easy to account for a connection between the two, on general and simple grounds, drawn from the nature of our mind and of human society in general, I think we are authorized to conclude that there actually does exist a necessary connection between the two, and that by diffusing knowledge of a moral and scientific character, we may hope for a decrease of crime, and be assured that though crime may in reality or apparently have increased for some reason, it would have increased still more without general education.

The greatest circumspection, indeed, is necessary, in drawing conclusions from statistical statements. Many opinions, apparently founded in reality, have currently been believed for many years, and, in the end, been found to be erroneous. But if, as I have stated, repeated facts agree with the conclusions at which we would arrive in the most cautious way of reasoning by analogy, and on principles which are always considered to hold—and if, in particular, our conclusions are corroborated by those individuals, who, before all others, have a sound and practical knowledge of criminals, it would seem that we may adopt the result, thus arrived at, as truth. There is no warden or superintendent of any penitentiary of note, with which I am acquainted, who does not consider want of education, and ignorance, as some of the most active agents in producing crime; and if there be any subject connected with education, or any affairs of human society, respecting which the knowledge of practical men is more indispensable, or reasoning on which, without ample knowledge of facts, is more gratuitous, that subject is prison discipline, and the true character of convicts.—But, as will be seen from the following letters, there is but one opinion among these gentlemen.

When I first saw the statements to which I have alluded at the beginning of this letter, I directed a series of queries to the wardens of our most prominent penitentiaries, and received from nearly all of them the readiest answers, not, indeed, always, on all of my questions. This would have been taken, in some cases, too much time, yet the statements with which the gentlemen favored me are quite sufficient to prove, that not only education, but instruction, even in the most elementary knowledge, is very deficient in most convicts.

Some of my queries tended to ascertain other facts, and some of the statements of those gentlemen touch upon statistics of the highest interest, besides the points in question, so that I have finally concluded to give their whole letters, of which I am convinced every one will approve. The more statistics we can possibly collect respecting crimes and criminals, the causes of the first, and the social stations of the latter, the better it is.

The Rev. Mr. Dwight, to whom I directed a similar

\* Some more remarks on the same subject may be found in a work which I lately edited: *Letters to a Gentleman in Germany: Philadelphia, 1834*, on page 324 and sequ.

series of inquiries, with regard to the Massachusetts State Prison in Charlestown, received my letter when setting out for a journey, but wrote me,—“ This report (the ninth) of the Boston Prison Discipline Society contains much information touching the point proposed in your letter, and enables me more effectually to contribute to the object of your inquiry than any other document in my possession, or that I can at present obtain,” &c. This report has not yet reached me, and I am, therefore, obliged to refer to it, without offering any extracts.\* From another quarter, I received no answer.

As Mr. Wood, the warden of our Eastern Penitentiary, has given the answer on a number of my queries, in his last report on the penitentiary under his charge, to the Board of Inspectors, I shall give an extract from that quarter.

As to the three other letters, I repeat, they are too valuable not to be given without curtailment. They prove once more the facts, that—

1. Deficient education, early loss of parents, and consequent neglect, are some of the most fruitful sources of crime.

2. That few convicts have ever learned a regular trade, and, if they were bound to any apprenticeship, they have abandoned it before the time had lawfully expired.

3. That school education is, with most convicts, very deficient, or entirely wanting.

4. That intemperance, very often the consequence of loose education, is a most appalling source of crime.

5. That by preventing intemperance, and by promoting education, we are authorized to believe that we shall prevent crime, in a considerable degree.

The following documents would serve yet for a variety of important reflections, e. g. the paramount importance of instructing the convict in some trade, and either by the folly or great mistake of some who are desirous to oppose this most necessary part of all prison discipline; and the interesting communication of the Rev. Mr. Smith, chaplain of Auburn State Prison, would furnish the material for some comparisons of a very instructive nature, with some statements in Mr. Guerry's *Essai sur la Statistique Morale de la France*; Paris, 1833—a work of great merit; but I must necessarily abstain from it, not to deviate from the nature of this letter.

I shall add to Mr. Wiltse's letter, a statement, which he kindly communicated to me about a year ago, and which I append to my introduction to a Constitution and Plan of Education for Girard College for Orphans, as showing how many convicts have lost their parents in their early years.

Before I conclude these remarks, I will only observe as an explanation of the following, that if it is stated of a convict, that he reads and writes, but has no common good school education, his acquirements often amount to little more than the knowledge of spelling, or the skill of making out the sound of the words, without the capability of finding out the sense of a phrase—and the skill to write his name. With regard to our inquiry, all below a common English school education, ought to be classed together.

It would have been desirable to know what number of foreigners are among the various classes, enumerated in the following statements, but this information is not essential as to our inquiry, as convicts, who are natives of foreign countries, belong nearly without an exception, to the least educated of the whole number.—From very interesting statements in the statistical appendix to the work of Messrs. Beaumont and Tocqueville, the proportions of foreigners among convicts in

America, to natives, will be found, and it is therefore easy to ascertain how many uneducated Americans still remain among the number of convicts.

I am,

Right Rev. Sir,

Your obedient and respectful servant,

FRANCIS LIEBER.

Philadelphia, Nov. 1834.

(Conclusion next week.)

## HOUSE OF REFUGE.

Report of the Committee appointed to Visit and Examine into the Affairs and Management of the House of Refuge—By Mr. LAWRENCE. Read in the House of Representatives, March 24, 1835.

The Committee appointed by a resolution of the House of Representatives, of the eighteenth December last, “ to visit and examine into the affairs and management of the House of Refuge, situate in the county of Philadelphia, and to make report touching its usefulness and economy, and also report how far the present organization of the House of Refuge is conformable to the principles of its original establishment, and also how far the imprisonment of persons in that institution, without the verdict of a jury, is conformable to the letter and spirit of the constitution,” Report, viz:

That in obedience to said resolution, the committee met in the city of Philadelphia; and, having made known to the Board of Managers the object of their visit, and having furnished them with a copy of the resolution under which they acted, every facility was promptly and cheerfully afforded by the board, to enable the committee to discharge the duties of their appointment.

The committee proceeded, first, to examine the buildings of the institution, its inmates, the manner in which they are fed and clothed, the kind of labor in which they are employed, and the system of government and discipline adopted by the managers.

The inquiry contained in the resolution, “ How far the present organization of the House of Refuge is conformable to the principles of its original establishment,” will be answered by a reference to the original design of the founders of this benevolent institution, the law by which it was incorporated, and the facts which will be hereafter detailed.

The House of Refuge has been justly termed a place for the reformation of “ juvenile delinquents.” It originated in the best feelings of the heart. It is a work of charity. It was established at first by individual liberality and enterprise; and it is in a great measure conducted and sustained by the same liberal and philanthropic spirit. It was incorporated by an act of the Legislature, in 1826. An appropriation of ten thousand dollars was granted by the State; and by the same act ten thousand dollars were directed to be paid by the commissioners of the county of Philadelphia, out of the county funds, for defraying the expenses of a site and building a “ House of Refuge,” and also five thousand dollars for repairs and incidental expenses.

The buildings are substantial, and their arrangements judicious. The inmates present a healthy appearance; their clothing is comfortable, and their fare is abundant and wholesome. Their labour is suited to their age and capacity—regular, but not severe. Their government, so far as the nature of the case will allow, is parental.—They have their regular hours of labour, and instruction: while every attention is paid to induce habits of industry, the greatest possible care is had for their intellectual improvement. The ordinary branches of an English education are better acquired in the House of Refuge than in many of our country schools.

These remarks will apply to both the male and fe-

\* Since the above was written, I have received the Ninth Report of the Boston Prison Society, but it contains little referring particularly to the matter before us.

male departments. The committee were pleased to witness the great attention paid by the managers in affording the means of moral and religious instruction.—Stated periods are set apart for devotional exercise: the duty is performed with proper solemnity, and the most respectful attention is paid by all classes. Ministers of different denominations attend and preach alternately every Sabbath. The day is spent in giving and receiving instructions of the most useful kind; and these duties appear to be performed by all concerned with pleasure and profit.

The number of inmates at present is, of males, one hundred and three, of females, fifty four. A very great proportion of the children in the House of Refuge are orphans. Of the females, there are nearly three-fourths who have no parents; and such as have, in most instances, derive no advantages from them.

To this unfortunate class, the advantages of this institution are peculiarly adapted. Here their vicious tempers and habits are restrained—their minds improved—principles of virtue inculcated; and not a few, who were in the broad road to ruin, have been rescued from destruction and prepared for usefulness, and are now filling respectable places in society. Some of these instances have come under the special notice of your committee, and are referred to as an evidence to show that the benevolent designs of the founders of this institution have been realized, in reclaiming youthful offenders from the disgrace and ruin consequent on a confinement in a jail or penitentiary, to which their vicious practices would unavoidably have brought them.

The committee will now refer to that part of the resolution which requires them to report "How far the imprisonment of persons in the House of Refuge, without the verdict of a jury, is conformable to the letter and spirit of the constitution."

The committee do not think it necessary at this time to go into a full examination of this important and difficult question. The institution has been under the management and direction of some of the ablest jurists of the State: they do not believe that any act would be done or encouraged by them which would be in violation of the constitution. However, it is highly probable that, in their laudable zeal to promote and effect the philanthropic end of the institution, some acts may have been done, either in the committal of inmates, or in the duration and cause of their confinement, inconsistent "with the letter and spirit of the constitution."—It is, however, the unanimous opinion of the committee, that, if such errors have been committed, they were of the head and not of the heart; because they believe the managers were actuated by no other than the most laudable motives—a zeal, an ardent and patriotic zeal, to rescue youthful delinquents from a course of conduct which would, if unrestrained, lead them to inevitable misery, degradation and ruin.

The committee is aware that there are conflicting opinions on this subject; but they believe that any argument of theirs would be unnecessary and superfluous, as the whole question has been ably stated and examined in the opinion delivered by Judge King, in the case of Commonwealth ex relatione Joseph against McKeagy, superintendent, in the first volume of Ashmead's Reports; and by a paper signed by Messrs. Joseph R. Ingersoll and John Sergeant, and laid on the desks of members. The committee have prepared a bill, accompanying this report, which they believe will restrain the institution within the "spirit of the constitution" and laws, and will at the same time throw no obstacle in the accomplishment of this laudable end.

To enable the managers of the institution to carry their designs into effect, and continue to society the benefits of the House of Refuge, heavy expenses have been incurred which must be provided for. Individual contributions have been very liberal, and are still so;

some large bequests have been given which are unavailable at present, but which will in a short time add much to its means. It will be recollected that the benefits of the institution are not confined to the city and county of Philadelphia—its doors are thrown open to the unfortunate objects of the institution from every county in the State, many of which have availed themselves of its advantages: for this reason and others, the Commonwealth has contributed to its support on former occasions, and in the opinion of your committee, should still bear a proportion of the expense of sustaining it until its own means are sufficient.

The annual reports of the managers render it unnecessary for your committee to go into much detail; but it is due to the managers to say that every thing in their power has been done to render the institution useful, and to carry into successful effect the objects of its benevolent founders and proprietors. Much time and labour is spent in the management of its affairs; all of which is gratuitously bestowed: the same remark will apply to the clergymen who officiate in the institution, as well as the medical gentlemen who are constantly in attendance, on all occasions when their services are required.

The committee have seen and conversed with several persons who spent several years in the House of Refuge, who uniformly bear testimony to its usefulness, the ability with which it conducted, the wholesomeness of its discipline, and who acknowledge themselves indebted to that institution for the respectable station they now hold in society.

With a view to remove all objections which may exist on the question of committal without trial by jury, the committee report a bill, which they trust will meet the views of the Legislature, and avoid the odium of a conviction in a criminal court, the effects of which are so sensibly felt by the youthful mind, and instead of producing reformation, generally tends to harden and confirm their vicious habits.

The committee cannot dismiss the subject without a passing notice of the qualifications of Mr. Edwin Young, superintendent, and Mrs. Catharine Shirlock, matron, for the stations by them respectively occupied; opportunity was not of course afforded to become so intimately acquainted with those individuals as would enable us to do full justice to them from personal intercourse, but we must say, that intelligence, benevolence, and a proper union of firmness and benignity, mark the whole deportment of each, and from information entitled to all credit, the committee believe their situations could not be better filled. To their parental care must greatly be attributed the extraordinary good order and decorum which pervades the institution; the salutary effects of virtuous female example and influence on erring individuals of that sex, is most happily illustrated in the family under the matron of that institution—there reigns throughout, all the propriety and harmony of a virtuous family, and many of the hapless inmates realize for the first time the pleasures of virtue, and are led by the force of moral influence, to loath the scenes of vice and misery with which they have been familiar from infancy.

The committee will add, that from a careful examination of the books kept by the superintendent and managers, as well as every thing connected with their respective duties, their efforts have been directed, and they have succeeded in making the institution what it purports to be, a House of Refuge.

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Arrived on the Schuylkill, to Neligh, Bull, & Co., two boats load of Coal—being the first brought from the mines this season.

*U. S. Gazette.*

## METEOROLOGICAL TABLE FOR 1834.

By ALFRED CREIGH.

(Continued from page 204.)

## MAY.

Days of the month.	9 o'clock.	12 o'clock.	3 o'clock.	Prevailing wind.	REMARKS.
1	54°	60°	63°	W	Clear
2	57	63	65	"	"
3	60	65	68	"	"
4	58	62	64	SE	"
5	50	52	54	E	Rain
6	56	62	69	S	Clear
7	50	51	51	E	Heavy rain
8	55	59	64	W5W	Showery
9	59	60	61	E	Rain
10	51	53	60	NW	Clear
11	60	68	70	SE	"
12	50	52	50	NW	"
13	39	40	40	W	"
14	43	44	45	"	"
15	44	44	46	W	"
16	53	55	58	"	"
17	54	60	64	"	" and cloudy
18	62	70	78	"	"
19	70	77	79	"	"
20	68	75	79	"	"
21	71	77	82	"	Clear
22	72	80	85	"	"
23	73	83	86	S	"
24	74	84	86	W	"
25	76	83	86	"	"
26	72	74	76	E	Cloudy. Rain
27	72	76	79	W	Clear
28	63	64	64	E	Rain
29	60	62	65	SE	Cloudy
30	62	68	72	"	"
31	67	68	69	E	Rain

## JUNE.

1	66°	67°	68°	E	Rain
2	64	66	70	W	Clear
3	63	67	70	NW	"
4	66	72	72	"	"
5	60	61	62	SE	Cloudy
6	64	69	72	N	Clear
7	74	80	84	W	"
8	76	82	86	"	"
9	79	84	90	"	"
10	78	84	86	S	"
11	73	76	79	W	"
12	70	72	76	"	"
13	68	70	72	WSW	Rain
14	62	65	68	SW	Cloudy
15	64	66	68	E	" and rain
16	60	65	70	NE	Clear
17	64	57	70	E	Rain
18	61	62	64	W	Cloudy
19	63	65	67	"	"
20	64	68	74	"	Fair. Thund.stor.
21	63	64	65	E	Rain
22	66	75	77	W	Clear
23	74	78	82	SE	"
24	76	82	85	W	"
25	72	82	83	"	"
26	76	83	86	"	"
27	73	78	83	"	"
28	68	69	70	NE	Rain
29	66	74	74	E	"
30	68	75	79	W	Clear

## JULY.

Days of the month.	9 o'clock.	12 o'clock.	3 o'clock.	Prevailing Wind.	REMARKS.
1	70°	75°	79°	W	Clear
2	76	84	86	E	Rain
3	73	81	82	N	Clear & showery
4	73	74	76	NE	Rain
5	75	82	84	E	Showery
6	78	83	86	WSW	Clear
7	80	85	90	"	"
8	88	91	94	W	"
9	88	93	92	"	"
10	80	84	84	"	"
11	72	75	78	"	"
12	71	76	79	"	"
13	70	77	80	NNE	"
14	71	73	76	W	"
15	73	77	84	"	"
16	72	74	76	"	"
17	72	80	78	NE	" and rain
18	70	75	79	W	Clear
19	72	76	81	"	"
20	71	77	83	WSW	Rain
21	72	75	78	W	Clear
22	80	85	89	"	"
23	82	88	89	"	" & showery
24	84	90	93	"	Clear
25	80	85	90	"	"
26	87	90	94	"	"
27	85	88	92	"	"
28	82	85	89	N	"
29	80	83	87	N NW	"
30	72	76	82	"	"
31	74	76	81	W	"

## AUGUST.

Days of the month.	9 o'clock.	12 o'clock.	3 o'clock.	Prevailing wind.	REMARKS.
1	75°	78°	82°	W	Clear
2	72	74	77	E	Rain
3	76	79	84	W	Clear
4	75	83	88	"	"
5	76	80	84	S	Rain and hail
6	80	85	86	W	Clear
7	78	87	88	NW	"
8	83	88	88	"	"
9	78	88	90	W	Showery
10	76	83	89	WSW	Clear
11	81	85	80	S	Clear and rain
12	82	88	91	W	" cloudy
13	80	86	89	N	Clear
14	78	82	84	W	"
15	76	80	81	N	"
16	72	76	78	NW	"
17	73	77	82	W	"
18	72	75	80	"	"
19	70	73	77	"	"
20	71	74	76	"	"
21	70	75	77	WNW	Cloudy
22	72	78	81	N	"
23	78	84	80	W	Clear
24	76	84	82	"	"
25	68	75	77	"	"
26	67	74	76	"	"
27	68	71	74	NE	"
28	66	70	74	"	"
29	69	75	75	"	" and cloudy
30	68	70	73	SE	"
31	66	72	73	S	"

(To be concluded.)

## REPORT ON PUBLIC SCHOOLS.

*Seventeenth Annual Report of the Controllers of the Public Schools,*

For the City and County of Philadelphia, comprising the First School District of the State of Pennsylvania, with their accounts.

Philadelphia—Printed by order of the Board of Controllers, 1835.

## REPORT:

In obedience to the Act of Assembly, passed March 3d, 1818, entitled "An Act to provide for the Education of children at Public Expense within the City and County of Philadelphia," which provides for the publication in the month of February in every year, of a statement of the amount of expenditure, and of the number of Children educated in the Public Schools,—the Controllers submit the following report:

By the stated returns from the several Sections, it appears that the Lancasterian Schools of the First District are attended by eight thousand, three hundred and forty-four pupils—made up of four thousand, five hundred and fifty-eight boys, and three thousand seven hundred and eighty-six girls.

The following statement shows the numbers in attendance at each school, viz:

	Boys.	Girls.	Total.
Model School,	255	189	444
Model Infant School,	155	165	320
<i>First Section.</i>			
Locust Street,	325	241	566
North Western,	189	216	405
Do. Infant School,	150	164	314
South Western,	188	114	302
South Eastern,	277	323	600
Do. Infant School,	129	136	265
Lombard Street, (colored,)	130	147	277
Schuykill School, (new,)	32	36	68
<i>Second Section.</i>			
Northern Liberties,	371	322	693
Do. Colored School,	70	41	111
Coates Street,	244	000	244
<i>Third Section.</i>			
Southwark,	344	302	646
Second Street,	224	000	224
<i>Fourth Section.</i>			
Penn Town-ship,	336	286	622
<i>Sixth Section.</i>			
Germantown,	88	67	155
<i>Ninth Section.</i>			
Moyamensing,	212	274	486
Infant School do.	130	159	289
<i>Tenth Section.</i>			
Marlboro' Street,	275	215	490
Master Street,	302	276	578
Do. Infant School,	132	113	245
Total,	4558	3786	8344

In those parts of the District where Lancasterian Schools are not established, in consequence of the sparseness of the population, as has been heretofore stated, the School Directors avail themselves of the best common schools in the vicinity, and during the past year, they have afforded the benefit of such schools to about twelve hundred children. These, added to the number above stated, exhibit a total of NINE THOUSAND, FIVE HUNDRED AND FORTY-FOUR pupils instructed at the public expense since the last report of the Board.

Thus, under the existing school laws of the first district, upwards of SIXTY THOUSAND CHILDREN have been enrolled in the public schools during the last sixteen years, to all of whom the benefits of this system of in-

struction have been freely extended. In acquiring the rudiments of a practical education, it is believed, they have been employed with profit and happiness to themselves, and with great advantage to the community, of which they are hereafter to constitute an important, active, and highly valuable portion.

During the past year arrangements were completed for opening and organizing the four infant schools alluded to in the last report, in the North Western and South Eastern schools of the first section, in Moyamensing and in Kensington. These schools are now fully occupied, under the care of competent and faithful teachers, and have in all respects met the expectations of the Board. The want of local accommodation alone has prevented the multiplication of these primary establishments. Their importance to the entire success of every system of general education is as fully appreciated by the Board of Control as their warmest advocates could wish, and numerous similar establishments, heretofore supported by individual contributions, would already have been connected with the public school system, if their immediate patrons had been willing to consign them to that guardianship, which existing laws prescribe to the Controllers. The unremitting and earnest attention of the Board, is given to this department of instruction in the sincere hope that by commencing with the earliest dawn of human intelligence, and thenceforward pursuing the work of education to the fullest extent which the character, circumstances, and prospects of the pupils admit, by furnishing, concurrently, the soundest principles of Christian and scholastic instruction, and habituating the pupils, almost from the cradle, to order, decorum, and industrious application—the great objects of the system will be most efficiently developed, and the interests of the community, at the same time with the temporal and eternal welfare of the pupils, most certainly promoted.

The original model Infant School established by the Controllers, continues to merit the warm approbation which has heretofore been expressed by the Board, and in addition to its direct utility to its pupils enrolled in it, has, under the guidance of its experienced and indefatigable teacher, been of great importance in furtherance of the plan by the indispensable aid it has furnished in preparing and qualifying teachers for the same department of instruction. Upon the application of a few highly respectable and benevolent individuals, who had by their own efforts assembled a school on the banks of the Schuykill, in the extreme South Western part of the First (city) Section, the Directors of that Section with the concurrence of this Board, have taken charge of the same and annexed it to the schools of the city. It promises great and permanent advantages to the quarter in which it is located.

The close of another year, happily brings with it, renewed cause for congratulation and thankfulness in the uninterrupted health of the district and the entire immunity which the schools have enjoyed from general or local disease.

The schools throughout the district have been found by the controllers at their stated and casual visitations, in a satisfactory condition, and the teachers employed in them continue to merit and receive from this board and from the immediate directors of their respective sections, the same cordial approbation of their competency, zeal and fidelity, which the controllers have heretofore expressed.

The account of expenditure by the Board during the past year, duly certified by the county auditors agreeably to law, and hereto annexed, shows that the controllers have drawn orders on the Treasury in that period for the amount of fifty-five thousand seven hundred and eighty-two dollars and 45 cents, of which sum, school expenses and furniture, are charged with the sum of forty-four thousand five hundred and fifty-four dollars; and real estate, (an item always remaining to

the credit of the county for at least its cost,) with eleven thousand two hundred and twenty-eight dollars and forty-five cents.

Seventeen years have now elapsed since the existing school laws of this district were enacted, and each revolving season furnishes new proofs of the wisdom manifested in their arrangement, and the practical and expansive usefulness of the system they have originated. Administered by the unbought services of respectable and benevolent citizens, whose efficient supervision and kind solicitude secure to the pupils every practical advantage. The public schools of the city and county of Philadelphia present all the facilities which the most ardent friends of general education could desire. Few, if any, of the branches of public service, it is thought, can boast more successful prosecution or more undeviating attention than this has received for a long series of years, from the disinterested efforts of philanthropic individuals, whose time and labor have been cheerfully bestowed upon this great work, almost without the notice of the community at large.

The controllers would again most respectfully bring this noble undertaking before their fellow citizens, and cordially invite to it, not only their general observance of its daily operations, but their most energetic support and countenance of an establishment destined to diffuse the light of knowledge and the blessings of Christian education to thousands and tens of thousands of the rising generation.

On behalf of the Controllers,

THOMAS DUNLAP, President.

Attest.

WM. PETERSOL, Secretary.

Chamber of the Controllers, }  
February 27th, 1835. }

To the Honorable the Judges of the Court of Common Pleas

The Auditors of the County of Philadelphia respectfully report,

That they have carefully examined the accounts and compared them with the Vouchers produced in support thereof, of the Controllers of Public Schools—and submit the following statement, as the result of said investigation:—

#### STATEMENT (NO. 1.)

##### School Fund General Statement.

##### Receipts for 1834.

To balance in the hands of the County Treasurer, January 1st, 1834,	1,955 \$1
Amount received by the Treasurer for Auditing School Fund for 1834,	
For 20 per ct. on 1,013 85 for 1832	202 77
" 30 " 94,784 for 1833	28,435 20
" 25 " 95,330 72 for 1834	23,847 68
	<u>52,485 65</u>
	<u>\$54,440 96</u>
Amount of Orders drawn on the Treasurer for Account Schools. In the year 1834 as per Statement No. 2.)	43,475 01
Amount for Account School Furniture (No. 2.)	1,078 99
Amount for Real Estate (No. 2.)	11,228 45
	<u>55,782 45</u>
Balance in the hands of the Treasurer on the 1st of January, 1835,	<u>\$7,256 55</u>

#### STATEMENT (NO. 2.)

##### Detail of Expenditures for Account Public Schools.

	Real Estate.	School Furniture.	School Expenses.	Total.
For amount Mo-				
del School.	3,342 31	93 35	2,180 55	5,618 21
For 1 section.	4,163 46	548 78	9,745 95	14,458 19
" 2 "	410 83	108 15	3,317 16	3,836 14
" 3 "		16 30	2,905 58	2,921 88
" 4 "			4,100 58	4,100 58
" 5 "			1,576 55	1,576 55
" 6 "			3,169 38	3,169 38
" 7 "			2,540 84	2,540 84
" 8 "			522 69	522 69
" 9 "	2,929 18	239 58	3,388 01	6,556 77
" 10 "	382 67	70 83	5,492 61	5,946 11
For General Expenses, books, paper and stationery, printing, advertising, maps, premium, for Infant Schools, Coal, County auditors, interests and other Incidental Expenses,			4,535 11	4,535 11
	11,228 45	1,078 99	43,475 01	55,782 45

#### STATEMENT (NO. 3.)

##### List of Outstanding Warrants at date not presented for payment, being on account of Loans.

(Warrant) No. 175	8,500
177	4,500
179	8 000
190	5,000—\$26,000.
JESSE Y. CASTOR,	} Auditors of the County of Philadelphia.
JOS. MOORE,	
WM. VOGDES,	
March 6th, 1835.	

#### IMPROVEMENT.

HUNTINGDON, Feb. 21, 1825.

Mr. Chandler,—In looking over the United States Gazette of the 18th inst. I observed a communication headed "Western Enterprise," in which the writer, over the signature of "Vigilant," states, (deriving his information from the Pittsburg Statesman,) "that some enterprising gentlemen of Pittsburg, are about starting a new daily line of elegant Canal Packets and Rail Road Cars, to run from this city to Pittsburg in three days and a half." It is true, that such a line of Packets and Rail Road Cars as "Vigilant" speaks of, will be started with the opening of the navigation, to run between the eastern and western emporiums of this state in the time stated; but it is a mistake that this line has been established by the "enterprising gentlemen of Pittsburg." It is a singular fact, notwithstanding the paramount interest the cities of Philadelphia and Pittsburg have, in the establishment of such a medium of communication, as the one noticed by "Vigilant," not one dollar of the stock, (so far as the writer of this article knows) is owned by any person resident in either of the before named cities. This fact is not mentioned in a spirit of censure, for I believe no opportunity was afforded to the citizens of those public spirited places, to take part in this enterprise; but it is stated with a view to correct the error into which "Vigilant" has fallen. The stockholders are residents of Harrisburg, Lewistown, Huntingdon, Springfield, Purnace, and Hollidaysburg.—



But it is believed the "gentlemen of Pittsburg" and Philadelphia will make up for the want of a primary interest in this undertaking, of great moment to them, by patronizing the "Line," and exerting all proper influence to sustain it." It is called "the Pioneer Line," and the Company which owns it, is known by the name of "the Columbia and Pittsburg Packet Boat Company." The proprietors have spared no expense to establish a line which will do credit to the state, and convey passengers from the east to the west, and "e converso," with more comfort to the traveller, than can be afforded by any other means of conveyance, and with as much speed. The boats are fitted up in a style equal to any of the New York boats, and each will be drawn by three first rate horses. The boarding and accommodations will be the best the country can afford. The Rail ways from Philadelphia to Columbia and Hollidaysburg, (across the Allegheny mountain) to Johnstown, will respectively be passed over by daylight; affording to the eye of the traveller a view of as fine a country between Philadelphia and Columbia, as ever the sun shone upon, and of as romantic and picturesque scenery, passing over the Allegheny Mountain, as the greatest admirer of nature's sublimity could desire. A view alone of the great "Horse Shoe Bend" of the Conemaugh river, and of the "Great Viaduct" crossing it, is worth the ride from Philadelphia to that point. The Viaduct stretches across the river with but one span, constructed of cut stone, eighty feet in height. Before approaching it from the east, you pass along the margin of the river for a considerable distance, when the stream strikes an angle of a rocky, bluff peninsula, and passing off to the left, leaving the base of the craggy cliff, apparently bids you a final adieu; but here the rail road cuts through the isthmus, and following its track about twenty perches, your astonished eyes behold the river again right in front, eighty feet below the point of observation, and immediately you find yourself on the viaduct, which unites two mount-ains, on opposite sides of the river, (by a work of art, as durable as the mountains themselves, and not surpassed in beauty by any thing of the kind,) the stream flowing so far below you, that for a moment you feel as if Alladin's Lamp had been performing its offices in your presence.

The river traverses about three and a half miles of distance from the time it leaves you on the one side of the neck of land, until it meets you again almost instantly on the other. By tunnelling the isthmus, at a point a little below the viaduct immense water power could be obtained. The tunnel would only be about twenty perches long. Following the rail road, about four miles further west, you pass through a tunnel 900 feet in length. In short, the proprietors of the "Pioneer Line" may with safety promise, that every variety of landscape, from the smiling field of the valley to the frowning steep of the mountain—and the proudest monuments of art which the world can boast, shall gratify the taste of those who may sojourn for "three days and a half" in their Packets and Cars from Philadelphia to Pittsburg.

Philadelphia is greatly interested in the success of the enterprising efforts of the gentlemen of Dauphin, Mifflin and Huntingdon counties, who have afforded so desirable a means of conveyance from the east to the west. The hope is cherished by these gentlemen, that a considerable portion of the travelling which heretofore has passed from the Eastern States up through the State of New York, and through the Lakes to the western country, may be diverted through Philadelphia, and by the Pennsylvania Rail Roads and Canals to Pittsburg. The distance to a large portion of the western country will be much shorter, and the mode of conveyance will now be equally as comfortable as any through the territory of our rival sister. It is hoped, therefore, that Philadelphians will see their interest in patronizing the Pioneer Line, and circulating as widely

as possible, a knowledge of the facilities it affords.—These Packets will carry no freight, so that travellers will not be incommoded for want of space for "locomotion," nor will they have their patience tired by slowness of progression. The motto of the Company is "Go ahead"

JUSTITIA.

From the U. S. Gazette.

### SALES OF REAL ESTATE.

March 26 and 27, 1835.

(By C. J. Wolbert.)

The brick house, bake house, and lot No. 373 south Front st. 19 feet by 9, subject to \$57 ground rent,	\$1,125 00
The frame house and lot No. 36 Plumb st. 19 feet 7 inches by 90.	875 00
The frame house and lot, N. W. corner of Plumb and George sts. 19 feet 8 inches by 45 clear,	900 00
The frame houses and lot No. 82 and 84 George st. 45 feet on George st. by 19 feet 8 inches, clear	1,000 00
The lot and buildings on the north side of Market st. wharf, 29 feet 7 inches by 157,	60,000 00
The Mansion House and $1\frac{1}{2}$ acres of ground of Benj. Sharpe, Esq. dec'd. at Germantown,	3,600 00
The Mansion House, other buildings and 3 acres of ground at Burlington, N. J.	8,750 00
The triangular lot on Eleventh st. between Spring Garden and Green sts. 268 feet $7\frac{1}{2}$ inches on Eleventh st. by 82 feet $5\frac{1}{2}$ inches on its south line.	5,000 00
The messuage and lot N. E. corner of Second and Coates st. 18 feet on Second st. by 72 feet 6 inches on Coates st. 28 feet on the east line by 73 feet 3 inches on the north line,	7,450 00
The brick messuage, back buildings and lot, N. E. corner of Chestnut and Schuylkill Seventh st. 18 feet on Chestnut st. by 108, subject to \$126 ground rent,	4,000 00
The frame house and lot, No. 10 Budd st. 20 feet by 55 subject to a ground rent of \$10.	625 00
The frame house and lot No. 18 Budd st. 22 by 100.	1,100 00
The brick house, frame house and lot, No. 20 Budd st. 22 feet by 100.	1,275 00

### DISTRICT COURT OF PHILADELPHIA.

An Act to establish the District Court, for the City and County of Philadelphia.

Sect. 1. Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania, in General Assembly met, and it is hereby enacted by the authority of the same, That from and after the 30th day of March, 1835, there shall be a court of record established in and for the city and county of Philadelphia, by the name and style of "The District Court of the city and county of Philadelphia," which shall consist of three judges learned in the law, one of whom shall be president, who shall have and exercise the same authority, power and jurisdiction, and be subject to the same duties and governed by the same provisions, as are enacted by the act, entitled, "an act to provide for the erection of an additional court within the city and county of Philadelphia, passed the 30th day of March, 1811, and the supplement to the said

act, passed the 3d day of March, 1812, and so much of the said two last mentioned acts, as are not inconsistent with this act, are hereby revived and continued in force, from and after the said 30th day of March, 1835; Provided, That the first Monday in each and every month, shall be a day for the return of writs of summons, (except summons in partition,) of writs of *copias ad respondendum*, *scire facias*, or *replevin*, of attachment of vessels under the act of 17th March, 1784, writs of inquiry of damages, and executions issued from said court, and such writs shall be directed to be returned to either of the said monthly return days, which may happen before the next term, or to the first return day of the next term at the option of the party taking out the same, and in all suits instituted in said court, where returns are directed to be made to a monthly return day, the party may, after such returns of writs of summons, and *copias*, *scire facias*, *replevin*, attachment, and inquiry, file declarations and other pleadings, put causes to issue and have them tried, and do all other matters and things in the prosecution of suits that might be done if the said writs were returned on the first return day of any term of said court; And provided also, That it shall be the duty of the said court, to make such rules and regulations respecting proceedings against bail as will prevent bail from being fixed in any case sooner than if the above proviso, relative to return days, had not been enacted; And provided also, That the stay of execution allowed by the 7th section of the act, entitled, "an act to regulate arbitrations and proceedings in courts of justice," passed the 21st day of March, 1806, shall count from the return day to which the original process issued, was returnable.

Sect. 2. In all actions instituted in the said court, on bills, notes, bonds, or other instruments of writing, for the payment of money, and for the recovery of book debts, in all actions of *scire facias* on judgments, and on liens of mechanics and material men, under the act of 17th March, 1806, and the various supplements thereto, it shall be lawful for the plaintiff, on or at any time after the third Saturday succeeding the several return days hereinbefore designated, on motion to enter a judgment by default, notwithstanding an appearance by attorney, unless the defendant shall previously have filed an affidavit of defence, stating therein the nature and character of the same; Provided, that in all such cases, no judgment shall be entered by virtue of this section, unless the said plaintiff shall, within two weeks after the return of the original process, file in the office of the prothonotary of the court hereby erected, a copy of the instrument of writing, book entries, record, or claim on which the action has been brought.

Sect. 3. So much of the act of 20th March, 1810, entitled an act regulating arbitrations, as provides for the compulsory reference of civil suits or actions and regulates the proceeding thereon, be repealed, so far as relates to the court hereby created, and actions to be brought therein, provided that nothing herein contained shall be construed to affect the application of the said act to the other courts of this commonwealth.

Sect. 4. From and after the 30th day of March, 1835, all actions, matters and things depending in the present District court for the city and county of Philadelphia, and all process issued from and returnable thereto, shall be transferred to and proceeded in by the court established by this act, and shall have the same effect in law as if there had been no limitation to the present court, and the governor shall, on or before the 30th day of March, 1835, appoint and commission three persons learned in the law, to be judges of the court established by this act, and it shall be the duty of the said judges to meet on the 30th day of March, 1835, or as soon thereafter as possible and proceed in the business of the court, and the judges of the present District court for the city and county of Philadelphia, are hereby enjoined and required to order the arrangement of business for the March term, and direct venues to issue for

summoning the requisite number of panels of jurors to attend at said term of the court established by this act, agreeably to the provisions of the 2d section of the act entitled "a supplement to an act to provide for the erection of an additional court within the city and county of Philadelphia," passed the 3d day of March, 1812.

Sect. 5. Any one of the judges of the court hereby established shall have power to try all civil pleas and actions, real, personal and mixed, and to grant motions;—and for these purposes shall have and exercise the same powers, authority and jurisdiction, as are hereby vested in the said court, and it shall be the duty of at least two of the said judges to sit separately at the same time, for the trial of causes, and the prothonotary of the said court shall appoint competent clerks to attend at said trials, when not present in person, and whenever it shall so happen that all of the said judges are not sitting at the same time, either separately or together, questions of bail and other matters requiring early attention, (to the decision of which a single judge is by the foregoing provisions or ordinary practice competent) shall not be permitted to interfere with jury trials, but shall be heard and disposed of by such one or more of the said judges as may not be then sitting for the trial of causes as aforesaid, that it shall be lawful for any one of the said judges when he thinks expedient, to reserve questions of law which may arise on the trial of a cause for the consideration and judgment of all the judges of said court sitting together. Provided, That either party shall have the right to a bill of exceptions to the opinion of the court, as if the point had been ruled and decided on the trial of the cause.

Sect. 6. It shall be the duty of the said court, to cause writs of *venire facias* to issue for summoning the requisite number of jurors, to be drawn in the manner now prescribed by law, to attend before each of the said judges, for trial of said causes, and each of the said judges shall have power to fine the said jurors for non-attendance, and while sitting for the trial of causes, shall have the same power and authority that is now possessed by the District court for the city and county of Philadelphia, and the seal heretofore used by the District court for the city and county of Philadelphia, shall be the seal of the court established by this act.

Sect. 7. There shall be a prothonotary appointed by the governor, for the said court, who shall perform all the duties of a prothonotary, and shall be entitled to receive like fees as other prothonotaries are entitled by law to receive for similar services, and be subject to the alike account to the commonwealth, and give the like security as the prothonotary of the Court of Common Pleas of the county of Philadelphia, is required by law to give for the due performance of the duties of his office, and it shall and may be lawful for the prothonotary, under the sanction of the court, to appoint one or more discreet persons as commissioners of bail, who are hereby empowered to take and receive recognizances of bail in any suit or action in the said court, and to administer oaths and affirmations, in case of the absence or sickness of the prothonotary, in the same manner as if the prothonotary was present.

Sect. 8. The motion for new trials, and in arrest of judgment and questions on reserved points which may be made and sustained before any one of the judges of the said District court, shall be reserved by the said judges, and heard and decided by the three judges of the said court or any two of them sitting together for that purpose.

Sect. 9. Each of the judges of the court hereby established shall have power to take and receive the acknowledgment of proof of all deeds, conveyances, mortgages, or other instruments of writing, touching or concerning any lands, tenements, or hereditaments, situate, lying and being in any part of this state, and also power to take and receive the separate examination of any feme covert, touching or concerning her right of dower.

er or the conveyance of her estates, as fully to all intents and purposes whatsoever, as any president of any Court of Common Pleas within this commonwealth may or can do.

Sect. 10. The commissioners of the county of Philadelphia shall provide proper and suitable apartments, in which the trials and business in the said District court shall be had and conducted as provided by this act.

Sect. 11. The tenth and eleventh sections of the act entitled "An act to establish the District court for the city and county of Philadelphia, and for other purposes," passed on the 26th day of March, 1832, be, and the same are hereby continued in full force.

Sect. 12. The judges of the court established by this act shall receive a yearly compensation of \$2000, to commence from the 30th of March, 1835, payable quarterly, out of any money in the treasury not otherwise appropriated.

Sect. 13. This act shall continue in force for the term of 10 years from the 30th day of March, 1835, and no longer.

Sect. 14. All process issued on or before the 30th day of March, 1835, from the present District Court, for the city and county of Philadelphia, and made returnable after the 30th day of March, 1835, shall have the same effect in law, as if there had been no limitation to the present court.

#### *Appointments by the Governor.*

The Governor has made the following appointments:—Hon. *Edward King*, President Judge of the Court of Common Pleas, to be President Judge of the District Court; *Thomas M. Petit*, Esq. is re-appointed as one of the Judges, and *George M. Stroud*, Esq. is appointed as the third Judge of the District Court.

There is consequently a vacancy on the bench of the Court of Common Pleas.—*U. S. Gaz.*

#### COUNCIL DOCUMENTS.

The following report, from the Special Committee on Public Clocks, was made at the last meeting of Councils.

#### *To the Select and Common Councils.*

The Joint Special Committee on *Public Clocks, &c.*, request leave to submit a *Second Report*,—

Which has been caused by a reference to this Committee, at the last meeting, of a communication from the "American Philosophical Society for the promotion of useful Knowledge," accompanied by a recommendation from five of the Watch makers, who compose the "observatory committee," that the subject of "a City Observatory," should be placed under the care of said Society, as the best means of attaining this important promotive of Science—These communications have placed the subjects referred to your committee, in a new light. It appears, that in the winter of 1832—33, the Society had under consideration the project of an Astronomical Observatory, but unwilling to interfere with the action had by Councils, upon the plan of the Watch makers, it was laid aside. Finding that nothing was done, towards the completion of the plan referred to the "Observatory Committee," the subject was again resumed, and whilst under consideration, the *first report* of the present committee was made to Councils; and with a view to render the Observatory more adapted to the object of regulating Public Clocks, in which every citizen has a direct interest, as well as the nicer operations required for rating Chronometers, so important to our Merchants and Navigators, which must be attained by the aid of care-

ful astronomical observations, your committee are induced to the conclusion, that an Observatory would be rendered more valuable, by uniting with the Society, in the appropriation of their Funds, with those of the city, to this object.—The committee would recommend that the location in Washington Square, would be appropriately changed to *Rittenhouse Square*, as being further removed from the bustle and noise of the centre of the city; and possessing the attractive connection between the name of that Square, and of the *American Astronomer*.

It could not be expected that any appropriation the city would probably sanction, even united with the funds of the Society, is to compete with the principal European Observatories; but, we have in this country, a long arrear to bring up before we can reach the time, in which such institutions are ranged—an establishment admitting of extension, would doubtless be extended in years to come, by donations and legacies; it would excite the pride of our citizens to add to its facilities; it would stimulate our sister cities to exertion, and perhaps the General Government; it would serve to countenance and promote a useful and improving branch of science; and to raise higher, the already acquired reputation of our city, as the seat of science—as far as the mechanic arts are concerned, it would establish new branches among us, and thus furnish new outlets for skill, and a new influx for money.

Your Committee therefore request leave to submit the draft of "An Ordinance providing for Public Clocks, and a City Observatory;" and to offer the following

Resolution, That the committee on Public Clocks, &c.—have permission to withdraw the draft of "a further Ordinance providing for the regulation of time keepers."

RICHARD PRICE, Chairman,  
DENNIS McCREDY,  
ISAAC ROACH,  
HENRY J. WILLIAMS,  
PETER WRIGHT,  
JOHN RODMAN PAUL.

#### *An Ordinance providing for public Clocks and a City Observatory.*

Sect. 1. Be it ordained and enacted by the Citizens of Philadelphia in Select and Common Council assembled, That the "committee on public squares," in conjunction with a committee of the "American Philosophical Society for the promotion of useful knowledge," be and they are hereby authorized to erect on *Rittenhouse square* "a City Observatory," and to procure the clock, transit and other instruments, so that the said Observatory may be fully complete in obtaining a standard city time, and astronomical observations. *Provided*, that only one half the expenses attending the same shall be paid from the City Treasury, and that the remaining moiety be paid by the said society.

Sect. 2. And be it further ordained by the authority aforesaid, That the "American Philosophical Society for the promotion of useful knowledge," is hereby authorized to appoint, subject to the approval of Councils, "a City Astronomer," whose duty it shall be to have charge of the City Observatory; and who shall, at least three times a week, when practicable, make such observations as will enable him to determine the true time, and transfer the same correctly to an astronomical clock, to be provided and located by the American Philosophical Society, in a central situation, as near as convenient to the City Hall, so that watch makers may be enabled to regulate their time keepers; and his salary shall be \$200 per annum, payable quarterly.

Sect. 3. And be it further ordained and enacted by the authority aforesaid, That Philip Garret, Isaiah Lukens, Ellis Clark, Thomas Voight, H. C. Riggs, and

David Weatherly, watch makers of the City of Philadelphia, be and they are hereby appointed a "committee on public clocks," and are empowered to take the direction of all clocks that Councils shall declare public; and they are hereby authorized subject to the approval of Councils, to appoint a suitable person to take charge of and regulate all "the public clocks," and whose salary shall be \$200 per annum, payable quarterly.

Sec. 4. And be it further ordained and enacted by the authority aforesaid, That the "Committee on markets," is hereby authorized to make suitable accommodations for a public clock and bell, at the east end of the market house in High street west of Broad street; and that "the Committee on public clocks," is authorized to procure, under the direction of said "Committee on markets," the said clock and bell; and also a new clock, to be located in place of the old one, now at Second and High streets.

Sec. 5. And be it further ordained and enacted by the authority aforesaid, That the clocks in the following locations shall be hereafter "Public Clocks," viz:

At the State House.

At the Market House, Pine and Second streets.

At St. Augustine Church, whenever the same is vested in the City Corporation, with an agreement that no rent shall be charged for the use of the cupola, and the access thereto.

At the Market House, High and Second street.

And the one to be placed at the Market House in High street west of Broad street.

Sec. 6. And be it further ordained and enacted by the authority aforesaid, That the Mayor is hereby authorized to draw on the City Treasury for the expenses that shall be incurred under the provisions of this ordinance; and that the ordinance enacted September 19, 1833, entitled "An ordinance providing for the regulation of time keepers," be and the same is hereby repealed.

### THIRD ANNUAL REPORT OF THE PHILADELPHIA LYING IN CHARITY.

Having in our former annual reports, fully stated the object of this association, and its importance in the list of Charitable institutions, as well as its title to the beneficence of a liberal and enlightened community, we do not purpose to remark much further at present upon these points.

The District Physicians have faithfully attended to their duties, in all cases brought to their notice by order of the managers.—and many poor industrious females have experienced their kind attention, at a time when their domestic concerns would otherwise have been sadly interrupted by an absence from home, or their feelings of independence in a great measure destroyed by a recurrence to that relief which public bounty provides, but from which the delicate female heretofore accustomed to comforts of her own, revolts at the idea of receiving.

It is not our business, or in the least degree our intention to attribute to any particular cause the difficulties which have more or less affected the community, during the past year, the effects of which in many instances fell heavily upon the laboring classes: the relief extended to some of these by the "Lying in Charity," has been well timed and efficient.

By information obtained from our District Physicians, it appears that they have attended on 69 cases during the past year.

By a statement of Edward Needles, the Treasurer, dated on the 1st inst. it appears, that there have been received since our last annual report, in the eleventh month, 1833, the sum of \$29 23—making together with the balance of \$69 29, then in the Treasury, an aggregate of \$98 52, available funds for the current expenses of the Institution. There has been expended,

for serving notices to Physicians and Managers, and for commissions on collections, \$16 12; Printing Constitution and Annual reports, and for their distribution \$38; for Medicines, Bleeding and Leeching, \$15 63, and for Nursing \$40—making altogether \$109 75, by which it appears that a balance of \$11 23 was due the Treasurer.

The subject of the funds, being of vital importance to the prosperity, even to the further progress of this Institution, as exhibited by the statement of the Treasurer, naturally suggests the necessity of greater exertions on the part of the managers, contributors, and friends of this charity, to extend the list of annual subscribers, which appears to be the readiest method we can now avail ourselves of, to replenish the exhausted Treasury. A fund is always required to defray the expenses of medicines, nursing, &c. But it is believed that were this Association in circumstances adequate to the erection of a Lying-in Hospital, as contemplated in the revised Constitution, its usefulness might be greatly extended, and its rank among the best charitable institutions of the present times be soon fully established.

The foregoing Report brought in by a Committee, was adopted and ordered to be printed.

ROBERTS VAUX,  
Vice President.

Attest—

H. WALTON, M. D. Secretary.

### DEFENCE OF PHILADELPHIA.

At a meeting of the Military Council of the First Brigade First Division, P. M. held at the Military Hall, on Thursday, March 5th, 1835, the following resolutions were unanimously adopted:

Whereas, It appears that the Congress of the United States has adjourned, sine die, without having made any provision for the defence of the river Delaware, and particularly, that the appropriation for the repair and armament of Fort Mifflin, has not become a law, by which neglect, the city of Philadelphia is left exposed to insult and invasion. Therefore

Resolved, By the Military Council of the 1st Brigade 1st Division, P. M. in full Council assembled, That the Brigadier General commanding this Brigade, be and he is hereby requested, to address forthwith, his Excellency, the Governor of this Commonwealth, upon the exposed situation of the city of Philadelphia, in case of war between France and the United States,—and that he would suggest to his Excellency the propriety of his strongly recommending to the Legislature the necessity of its making an immediate and sufficient appropriation for the complete repair and armament of Fort Mifflin.

Resolved. That the Governor be requested by the Brigadier General to recommend to the Legislature, that all fines hereafter to be collected in the 1st Division, P. M. for non-performance of militia duty, shall be expended in equipping the several volunteer regiments in the said Division.

Resolved, That these proceeding be published in the daily papers of the city.

A. M. PREVOST,  
Brigadier Gen. and Pres't. of the Council.

JAMES PAGE, }  
COL. J. S. RILEY, } Vice Pres'ts.

A. J. Pleasonton, }  
Geo. Cadwalader, } Secretaries.

Printed every Saturday morning by WILLIAM F. GEDDES, No. 9 Library street.

The publication office of the Register has been removed from Franklin Place, to No. 61, in the Arcade, Western Avenue, up stairs.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.--NO. 15.

PHILADELPHIA, APRIL 11, 1835.

No. 379.

## APPENDIX

### TO DR. LIEBER'S LETTER.

(See Register, page 216.)

#### I.

*Extract of the Warden's Report, to the Board of Inspectors of the Eastern Penitentiary, (in Pennsylvania,) in 1834.\**

"In my last annual report, I alluded to the want of common school learning, which prevailed so generally among convicts. On a more minute examination of this subject, I find that of the whole number received into this penitentiary, from the opening, viz: two hundred and nineteen, that forty-two could neither read nor write; fifty-nine could read, but not write, and one hundred and eighteen could read and write: of the latter class, one had been educated at a university, one had a good English education, and is a tolerable Latin and French scholar, one understands English, Dutch and Hebrew; besides these, there are no more than seven who have had a good education, and not more than two others who could read and write tolerably, leaving ninety-eight who could read or write indifferently, many of these as well as most of those who could read only, were not able to read a sentence without spelling many of the words. It is not only in their elementary education that these have been neglected in their youth, but also in another respect, namely, their ignorance of trades and occupations to qualify them for useful citizens. On an investigation of this point, I find that out of the whole number (219) only thirty were regularly bound and served out their apprenticeship, sixteen remained during their minority with their parents, thirty-eight were apprenticed, but left their masters under various pretences, most of them ran away, and gave as a reason, the severity with which they were treated; the want of food, clothing, &c.; two of them declare that their masters first taught them to steal; eight were slaves until twenty-one or twenty-eight year of age, and one hundred and twenty-one were never apprenticed, but were either hired by their friends or themselves, and lived in this unsettled way during their minority.

"There are among mankind some who have been liberally educated, and carefully superintended during their youth, who nevertheless become abandoned, and we see others, without these advantages, rise to the first stations in society, yet the disproportion is great. I therefore believe, that had the two hundred and nineteen convicts above mentioned, received a suitable education, both moral and physical, and been placed with good masters until twenty-one years of age to learn some practical business, where they would be taught industry, economy, and morality, instead of spending their youth as they have, that few of them would ever have been inmates of a prison. All philanthropists agree, that the best mode of preventing crime, is properly to educate youth."

#### II.

*Letter of Mr. Wiltse, Agent of Sing-Sing State Prison.*

STATE PRISON,  
Mount Pleasant, Aug. 27, 1834 }

*My Dear Sir,—*

In reply to your favor of the 22d inst., I hand you enclosed such statements as I have been able to collect.

Whatever may be the fact in other countries, there can be but little doubt but education, and early application to some kind of business, would have a powerful tendency to decrease crime. From my long intimacy with criminals, I have found that a large majority of convicts may be traced to the formation of bad habits in *early life*, from a total neglect on the part of their parents, or guardians, in giving them education, and confining their attention to some regular, systematic business.

I am, very respectfully,

Yours,

ROB. WILTSE.

To DR. F. LIEBER.

N. B.—You will observe that but 50 out of 842, have received any thing like an education.

R. W.

There are at present 842 prisoners.

170 prisoners cannot read nor write.

34 ' have never been at school of any kind.

85 ' know how to read, but not to write.

510 ' know how to read and write, but a large proportion of this number very imperfectly.

42 ' received a good common English education.

8 ' went through a college.

485 have been habitual drunkards; about one-third of the above number actually committed their crimes when *intoxicated*.

The other queries about the apprenticeships I cannot answer correctly, without going to each man in the prison; at present, my time will not permit me to do it.

R. W.

*Addition from page 149, of A Constitution and Plan of Education for Girard College for Orphans, Philadelphia, 1834.*

"As it is a question of great interest to the criminalist and moralist, to know how many convicts have lost their parents at an early age, I begged Mr. Wiltse, the agent of the Sing-Sing Penitentiary, to answer certain queries, which he promptly did, with that kindness with which he has always afforded me information respecting the state prison under his superintendence. There are about 800 convicts in Sing-Sing. Some few of them were unable to say when they had lost their parents; of whom, therefore, many must be supposed to have lost them early; of the others,

48 lost their parents before they were five years old.

72 ' after they were five years old, and before they were 14 years old.

41 ' after they were 14 years old, and before they were 18 years old.

161 lost their parents before they had arrived at their

eighteenth year, which makes one-fifth of all the prisoners. If we add to them, those who were unable to give an account of themselves, we may say that nearly one-fourth of all convicts lost their parents before they were eighteen years old. Of these, probably the greater part, say three-quarters, therefore nearly one-fifth of the whole number, fell into vice in consequence of their forlorn situation—of having become orphans at an early age."

## III.

Letter of Rev. Mr. Smith, Chaplain of Auburn State Prison.

STATE PRISON,  
Auburn, September 12, 1834. }

Dear Sir,—

The agent and keeper has just received, through Governor Marcy, your communication, making certain

inquiries respecting the former character of the convicts in this prison, as it regards their education, habits, &c.; and as my sphere of duties has led me to be more familiar than he is with the subject, he requests me to furnish the answer, which I most cheerfully do.

Some of the questions, however, I cannot answer at all, and few, if any, of the others, in *precisely the form in which they are proposed*, without interrogating, separately, six or seven hundred convicts, which, with my limited opportunities of intercourse with them, would necessarily delay this reply for months.

I must therefore beg you to accept, as the best reply which I can at present give to your interrogatories, the following statements, (taken from minutes which I have at hand) from which you will, I hope, be able to glean the *substance* of the information sought, on most of the points of inquiry. The statements which follow, relate to the 670 convicts (twenty-eight of whom are females) in prison on the first ult.

## CRIMES.

Education—Five Classes	Murder.	Manslaughter.	Assault and Battery to Kill.	Rape.	Assault and Battery to Rape.	Perjury.	Robbery.	Arson.	Forgery.	Passing Counterfeit Money.	Burglary.	Incest.	Sodomy.	Bigamy.	Grand Larceny.	Petit Larceny, 2d offence.	Breaking Jail.	Total.
Of Collegiate Education									2						1			3
Of Academical do									3						5			8
Of Common do	1	6	7	1	4	4	4	2	41	21	24	31	1	70	13			204
Of very poor do	3	4	12	2	4	4	3	4	25	23	33	11	1	105	37	5		267
Without any do		4	12	8	4	4	6	6	3	8	26	1	1	66	35	4		188
Total	4	14	31	11	12	12	13	12	74	52	83	5	2	3247	85	10		670

## CRIMES.

Habits—in respect to the use of Spirituous Liquors.	Murder.	Manslaughter.	Assault and Battery to Kill.	Rape.	Assault and Battery to Rape.	Perjury.	Robbery.	Arson.	Forgery.	Passing Counterfeit Money.	Burglary.	Incest.	Sodomy.	Bigamy.	Grand Larceny.	Petit Larceny, 2d offence.	Breaking Jail.	Total.
Excessively Intemperate	3	9	16	5	8	5	7	4	22	9	35	2	1		87	37	7	258
Moderately Intemperate	1	5	11	5	4	6	3	6	20	24	28	2	1	2	95	29	3	245
Intemperate	4	14	27	10	12	11	10	10	42	33	63	5	2	2	182	66	10	503
Temperate Drinkers			4	1		1	3	2	31	19	17			1	61	19		159
Total Abstinent									1		3				4			8
Total	4	14	31	11	12	12	13	12	74	52	83	5	2	3	247	85	10	670

Under the influence of spirituous liquors at the time of committing their crimes

Had intemperate parents

Lost or left parents before 21 years of age

Do do 17 do

Do do 14 do

Do do 10 do

Had been in Sabbath School previous to conviction

Had been habitual daily readers of the Bible

Had committed the Decalogue to memory

Had been strict observers of the Sabbath

Married	352
Lost wives by death, previous to conviction	31
Left wives previous to conviction	86
	— 117
Living with wives when arrested	235
Unmarried	318
Lost or left wives previous to conviction	117
Living without wives when arrested	435
Children of the married convicts	953

## REMARKS.

Under the head "Education," my fifth class answers to your first—"Do know neither to write nor to read." It embraces not those only who did not know the alphabet, but all those who could read in the New Testament, when they came to prison.

My fourth class answers, with little variation, to your second—"Know how to read, but not to write."—Some of them could write very poorly, but few of them more than their names.

My third class embraces some of your third, fourth and fifth—"Know to read and write"—"Know to read, write, and cast accounts"—"Received a good common English education"—but consists chiefly of your fourth. There are a few in it who can be said to have "received a good common English education."

The other classes are sufficiently explained by the terms used.

Regretting, extremely, that I am unable to answer inquiries more definitely,

I am, my dear Sir,

Most respectfully yours,

B. C. SMITH,

Chaplain of Auburn State Prison.

DR. FRANCIS LIEBER.

## IV.

*Letter of Mr. Pillsbury, Warden of Connecticut State Prison.*

STATE PRISON, }  
Wethersfield, Sept. 23, 1834. }

Dear Sir—

Yours of the 12th inst. came duly to hand, and is cheerfully replied to as soon as answers to your questions could be obtained. If the following statements should somewhat more than cover the ground embraced in your inquiries, I doubt not, that your interest in the subject, will cause you to give them a welcome reception.

The whole number of convicts in the Connecticut State Prison is 180. No convict here has ever received either a college, or classical education; nor has any one of such education ever been an inmate of this prison. The Chaplain, who, from 1827 to 1830, was acquainted with nearly 1000 convicts, in the Mount Pleasant State Prison, at Sing Sing, N. Y., and with many other convicts in the prisons in Philadelphia, Baltimore and Auburn, has never known a liberally educated convict in prison.

The proportion of 8 in 100 convicts when they came to prison, could read, write and cypher.

The proportion of 46 in 100 of convicts, could read and write.

'	32 in 100	'	could read only.
'	22 in 100	'	could neither read nor write.
'	72 in 100	'	never learnt any trade.
'	24 in 100	'	began to learn or learned trades which they did not follow.
'	4 in 100	'	have followed regular trades.

The proportion of 44 in 100 convicts, committed their crimes while under excitement, caused by the use of ardent spirits.

There is no convict here who, before his conviction,

could read and write, and who was of temperate habits, and followed a regular trade.

Of those convicts here, who could read and write, and were temperate, there are 2 in 100

Of those who could read, write, and followed a trade, there are	4 in 100
' who are owners of real estate	6 in 100
' who are owners of real estate, and were temperate	2 in 100
' who were owners of real estate, and unmarried	0
' who have never been married	64 in 100
' who were married, and followed a trade	4 in 100
' who were married, followed a trade, and were temperate	0
' who acknowledge themselves to have been habitual drunkards	75 in 100
' not natives in Connecticut	40 in 100
' deprived of their parents, before they were 10 years old	32 in 100
' deprived of their parents, before they were 15 years old	15 in 100
' those who are colored are	*23 in 100

The maximum inclination to crime, appears to be at the age of 25.

From 1790 to 1834, there were 1,113 instances in which individuals were sentenced to the State prison for the commission of crime. These crimes may be ranged under the three following heads in these proportions, viz:

<i>Violence,</i>	<i>Theft,</i>	<i>Fraud,</i>
190	716	207

Upon an average, each criminal cost the State for his apprehension and conviction, \$75, and the average term of time that each was sentenced to remain in confinement, (abating 45 sentences for life) has been 3 years.

Since the prison has been established in this place, some seven or eight years ago, the number of convicts has considerably increased, and hence, the French commissioners, and English gentlemen may have naturally inferred, that there must have been an increase of crime in equal proportion. But the truth of this matter seems to lie here. As soon as the new prison was built, the criminal code was revised, and alterations made so as to punish a larger number of offences, with confinement in the State Prison. Besides, because the discipline of the prison was thought to have a strong tendency to reform those, who came under its influence, and as such economy was used, as to make the labor of the convicts more than meet the expenses of the whole establishment, the courts in the different counties, were more than ever inclined to sentence individuals to the State prison for the same offences.—For some time past there has been a very manifest decrease in this State in the instances both of crime and convictions. Ever since last January, there has been a diminution of at least 20 in the number of convicts.

Viewing with high satisfaction the deep interest which you evince in that department, where my labors have for many years centred,

I am Sir,

With sentiments of sincere regard, yours, &c.

A. PILSBURY,

Warden of Connecticut State Prison,  
pr. G. Barrett.

To DR. F. LIEBER, }  
Philad. }

\* In the State blacks are to the whites as 3 to 100.

## OBSERVATIONS BY DR. JULIUS.

Having had the privilege, during my stay in the city of Philadelphia, to assist at a meeting of the members of the Society for Alleviating the Miseries of Public Prisons, where the preceding Letter of Dr. Leibor on the Relation between Education and Crime, was read, I was requested to state what I thought to be the result of the school system of Prussia in reference to this interesting question. I shall refer, therefore, as shortly as possible, the few conclusions I have thought myself competent to deduce from an uninterrupted observation of the number of crimes, as well as of the state of education in most of the countries of Europe and America, during ten years, without claiming for what I have to say a greater authority than the observations of a single individual, spending the largest part of his time in an inland continental capital, may entitle him.

The well known—and, since Mr. Cousin published his interesting Report—far-famed Prussian system of National Education, went properly into practice in the year 1819, and has three fundamental principles and supporting pillars.

First, the erection of seminaries or schools for teachers in the elementary schools, of which Prussia, with a population equal to that of the United States, has now forty-three, of the Protestant and Catholic denominations, furnishing annually from eight to nine hundred teachers, well informed and trained during three years, for their future avocation.

Secondly, the legal obligation of parents, guardians, &c. to send children under their care, if they are not instructed by qualified teachers\* at home, or in authorized private schools, to the public schools, from the first day of their seventh to the last day of their fourteenth year.

Thirdly, the foundation of the whole system on a religious and moral basis, so that the first or the two first hours of each day are devoted entirely to a regular course of religious instruction, teaching, besides the reading of the scriptures, (for the Catholics, histories taken from the Bible,) all the duties of man towards his Creator, the constituted authorities, and his fellow creatures, as they are inculcated by the gospel.

These general regulations on education have been gradually augmented and strengthened by the Prussian Minister of Public Instruction, with a particular care for the reformation of juvenile offenders. In this way, since the year 1820, twenty-eight institutions for juvenile delinquents, or neglected children, none of them larger than for sixty boys or girls, have been established and supported by voluntary subscriptions, in different parts of the kingdom, under the especial protection of the above-mentioned minister. Since 1828, the board of the same minister has collected from all the tribunals and courts of law in the kingdom, regular returns of all the indictments brought before them, against boys or girls, not older than seventeen years. The numbers furnished by these official returns, and the proportion of this kind of indictments in each year, to the general population of the monarchy, are the following:

	1828	1829	1830	1831
Juvenile Indictments.				
Until 11 years accomplished,	81	74	72	94
From 11 to 17 years,	671	517	544	638
Whole number of committed children	752	591	616	732
Uninstructed children	80	54	60	56

\* The legal qualification of a teacher consists in his having passed different examinations, the last by the Consistory court of the province where he intends to settle.

Children not yet having taken the communion*	469	410	357	431
Proportion of the whole population 1:16924.1:21524.1:21167.1:17460				

The first fact resulting from this table is, that under the Prussian School system, a simultaneous *increase* of the population of three per cent, (from 12,700,000 to 13,000,000) and a *decrease* of indictments against children, of three per cent has taken place. This cheering fact, connected with the remarkable circumstance, that the indictments against children below eleven years, who had enjoyed the blessings of the system only during four years, have *increased*, (from 81 to 94) when a large *decrease* of the indictments against children of more than eleven years, (from 671 to 638) took place, which were able to reap the full benefit of a religious and moral education, seems to prove undeniably that the effects of the system have been good and beneficial.

Another remarkable fact resulting from these Prussian returns, is, that the smallest number of juvenile delinquencies occurred in the least instructed entirely agricultural provinces of Pomerania and Posen, (the first protestant, the last Catholic) and the largest numbers in the best instructed but also most industrious and manufacturing provinces, those of Saxony and the Rhenish countries, whose commercial and manufacturing districts surpass even the capital in this kind of transgressions.

Trying to elucidate the circumstance just mentioned, I must state that the crimes for which the children were committed in those parts of the kingdom, where their number was small, have been generally of a more heinous character (arson, &c.) than in the provinces with more indictments, but principally for fraud or larceny. Similar observations relating to the whole number of criminals, and to the kind of crime, can be made in the Austrian monarchy, which contains very heterogeneous and widely different masses of population.

The order in which the proportion of the number of every kind of indictments to the population, has increased during the five years of 1824, 1825, 1826, 1827, and 1828, was in seven provinces of Austria, the following:—

Provinces.	Population.	Indictments to inhabitants.
Moravia and Silesia,	German and Slavonian,	1 to 1707
Austria Proper,	German,	1 to 1676
Bohemia,	Slavonian and German,	1 to 1428
Galicia,	Polish,	1 to 1382
Interior Austria,	German, Slavonian & Italian,	1 to 609
Tyrol and Vorarlberg,	German and Italian,	1 to 322
Dalmatia,	Slavonian,	1 to 138

The decreasing proportion of children visiting the schools, among one thousand able to attend, was in the same provinces in the years 1824, 1825, and 1828, the following:—

Provinces.	From 1000 Children went to School.
Austria Proper,	948
Tyrol and Vorarlberg,	945
Moravia and Silesia	919
Bohemia,	906
Dalmatia,	649
Interior Austria,	443
Galicia	115

\* In Germany, the first communion, called the *confirmation*, as well among the Protestants as with the Catholics, is held as necessary for every adult person as baptism, to allow him to join in any act celebrated by the Church, as marriage, taking the Lord's Supper, &c.



In comparing these two tables, I find the increase of crime with a decrease of education nearly agreeing in Austria Proper, in Moravia, Silesia, Bohemia, in Interior Austria, and even in Dalmatia, where the numbers are too small to furnish a fair and accurate judgment. But on the reverse, the Tyrolese, one of the noblest and bravest races of the world, sending nineteen-twentieths of their children to school, give more occupation to Austrian judges, than all the other provinces of the empire, except Dalmatia—the common asylum of fugitives from lawless Turkey, and Galicia, whose Polish inhabitants, shunning, like their brethren in Prussia, popular instruction, send only the ninth part of their children to school, and furnish at the same time by far less criminals than Interior Austria, Tyrol or Dalmatia.\*

In relating these facts, which are probably much less contradictory than we might judge at first glance, I cannot help saying, after having stated my belief, that besides the influence of instruction there are many more elements which contribute to the increase or decrease of crime, (one of the principal of which is the pursuit in life) that more than any thing seems to depend upon the manner of elementary instruction, whether it be a mere mechanical one in reading, writing, arithmetic, and some geographical and historical knowledge, confining the highest information to the reading of the Scriptures, and to committing biblical verses to memory, or whether it is one resting on a religious and moral foundation, where all other knowledge imparted to the child, finds its test and its confirmation.\*

This opinion, though it diminishes in value the test of the information of convicts, which ought to be compared with what we have not, an accurate knowledge how many of the present adult population of any country in the world have been instructed or educated is not new. It has been maintained and even promulgated, in all parts of the world, by candid and benevolent statesmen and philanthropists.

In this country, we find Governor Wolcott saying as early as in 1826, in his message to the legislature of Massachusetts: "As high mental attainments afford no adequate security against moral debasement, it appears to be indispensably necessary that we should unite with our neighbors, and with all virtuous men of the present age, in maintaining our share in the great conflict which is prosecuting, of virtue against vice."†

Even eight years earlier, *John Falk*, the same who founded in 1813, the first House of Reform for juvenile offenders, said in a petition to the Chambers of the Grand Duchy of Weimar: "Of what use or advantage to the commonwealth are rogues that know how to read, to write or to cypher? They are only the more dangerous. The acquirements mechanically imparted to such men, can serve only as so many master keys put into their hands to break into the sanctuary of humanity."

To close these remarks by a similar statement from Great Britain, the connecting link between the experience of the eastern and of the western continent, I subjoin the following passage of an eminent medical writer:

"There is no one characteristic of the present age

\* The great amount of crime in Tyrol, may be, perhaps, accounted for, by the character of the Tyrolese, who, like most mountaineers, prefer, in their spirit of independence, to revenge a wrong, rather than to go to law, and by the circumstance that a very great number of the male population of Tyrol annually travel into foreign countries as pedlars, with goods manufactured at home.—*LIEBER*.

† First Report of the Managers of the Society for the Improvement of Prison Discipline. Boston, Second Edition, page 83.

more remarkable than its inclination to undervalue all moral education. The wonders which have been effected by the mechanical inventions of Watt, Arkwright, (Fulton,) &c. seem almost to have overturned the common sense of the times, and every power is stretched to its utmost, to render the rising generation not a moral but a mechanical race. This is certainly exactly the reverse of what ought to take place, inasmuch as the happiness of men depends far more upon the proper control of their internal feelings, than their external circumstances; far more upon a mind 'void of offence' than upon the highest intellectual acquirements. Neither can there be a greater mistake than the supposition, that knowledge is always in itself beneficial. It is indeed a tremendous engine of good or evil. With him whose mind is directed aright, it is an instrument of advantage to himself and to the world; but with him whose moral feelings are not decidedly virtuous, it is but an additional and terrible weapon of ill."\*

N. H. JULIUS.

PHILADELPHIA, 20th January, 1835.

From the Pittsburg Gazette.

### OLEAN AND BUFFALO.

Having had some curiosity to know at what time the navigation of the Allegheny river from Olean to Pittsburg usually commences in the spring, we yesterday called on Mr. Joseph Welsh, who keeps the tavern at which many persons from that country stop, to get information on that point. In reply to our question, he furnished us the following statement, taken from his books. The first arrival from Olean was, in

1831, on the 30th of March:

1832 " 15th "

1833 " 31st "

1834 " 20th "

We believe that the harbor at Buffalo is not usually open before about the first of May, or certainly not earlier than the 24th of April. So that New York would have an outlet to the Ohio, by the way of Olean, at least one month earlier than by Buffalo. In that time a steam boat could run from Olean to St. Louis, discharge and receive cargo there, and return to Olean.

The dates above mentioned are the times when rafts arrived at Pittsburg from Olean, so that they must have left the latter place five or six days earlier.—This statement of facts exhibits the importance of the Rochester and Olean canal, and the Erie rail road in a strong light.

Since writing the above paragraph, we noticed that the Legislature of New York have rejected the bill in relation to the New York and Erie Rail Road.

The neglect to make this road will deprive the city of New York of some of the advantages which she might enjoy by the navigation of the Allegheny from Olean.

The New York Canal, not usually being open before the 15th of April, that is, about three weeks later than the average time of the opening of the Allegheny river from Olean. The Rail Road, being available earlier, would be adopted to deliver merchandize at Olean, until the Canal would be opened.

But, even throwing out of view the Rail Road, if the Rochester and Olean Canal was completed, it would be navigable three weeks earlier than the Lake at Buffalo.

\* London Medical Repository.—New Series. Vol. iii. p. 337.

## METEOROLOGICAL TABLE FOR 1834.

By ALFRED CRIEGL.

(Concluded from page 218.)

## SEPTEMBER.

Days of the month.	9 o'clock.	12 o'clock.	3 o'clock.	Prevailing wind.	REMARKS.
1	67°	69°	69°	E	Rain
2	68	71	73	W	Cloudy
3	72	75	78	"	Clear
4	78	85	84	SE	Heavy Shower
5	76	80	81	S	"
6	75	78	82	SW	Clear
7	74	75	76	N	"
8	69	70	72	SE	Drizzling rain
9	75	75	78	W	Cloudy
10	64	85	66	NW	Clear
11	60	65	62	"	"
12	60	63	64	"	Cloudy
13	58	65	68	S	Clear
14	62	68	70	W	"
15	60	65	69	S	"
16	62	68	70	W	"
17	64	69	69	E	Showery
18	66	72	72	"	"
19	68	70	71	W	Clear
20	66	69	72	"	"
21	68	72	74	"	"
22	62	68	68	NE	" and rain
23	67	73	79	W	Clear
24	60	63	66	NW	Cloudy
25	62	71	78	W	Clear
26	64	78	83	"	"
27	63	67	69	NE	" and rain
28	57	56	56	"	" and cloudy
29	54	55	56	N	Clear
30	54	56	59	S	"

## OCTOBER.

Days of the month.	9 o'clock.	12 o'clock.	3 o'clock.	Prevailing wind.	REMARKS.
1	56°	62°	68°	S	Rain
2	58	65	67	"	Clear
3	57	66	78	W	"
4	60	62	64	E	Rain
5	56	60	64	NE	Clear
6	56	64	73	W	"
7	55	60	63	NE	"
8	58	65	68	W	"
9	54	56	56	E	Rain
10	56	66	74	W	Clear
11	53	57	63	"	"
12	56	61	64	S	"
13	50	52	54	NW	" Rain at ng't.
14	44	50	52	NW	Cold and Clear
15	47	55	57	W	Clear
16	42	45	50	"	Cloudy
17	51	62	74	"	Hail and rain.
18	54	60	73	W	Clear
19	47	53	55	"	Rain
20	46	49	53	W	Clear
21	44	49	55	"	"
22	47	54	62	"	"
23	51	57	60	"	"
24	48	56	60	NW	"
25	48	49	50	NE	Cloudy
26	48	48	54	E	"
27	49	55	59	SW	Clear
28	45	55	58	W	"
29	41	49	51	W	"
30	40	45	49	E	Cloudy
31	42	46	52	NE	" and Clear

## NOVEMBER.

Days of the month.	9 o'clock.	12 o'clock.	3 o'clock.	Prevailing wind.	REMARKS.
1	44°	49°	51°	E	Cloudy.
2	41	41	41	"	Drizzling
3	40	42	46	SE	Cloudy
4	46	48	51	"	"
5	45	47	49	W	Rain and cloudy
6	46	48	54	NW	Clear
7	50	55	63	"	"
8	54	56	60	"	"
9	50	52	57	W	"
10	46	51	55	S	"
11	49	53	58	W	"
12	44	48	57	W	" and cloudy
13	48	54	59	W	Clear
14	47	50	52	N	"
15	38	37	37	NE	Clou'y. snow 3in's.
16	34	36	39	SE	"
17	34	35	36	"	Sleet and rain
18	40	44	47	W	Clear
19	46	46	46	N	"
20	46	47	51	"	"
21	49	54	59	"	"
22	42	43	44	NE	Rain
23	46	43	42	W	Cloudy
24	36	40	43	W	Clear
25	42	45	48	"	"
26	39	41	46	NE	"
27	40	43	48	W	"
28	44	48	52	"	"
29	42	43	45	E	Rain
30	45	49	52	W	Clear

## DECEMBER.

Days of the month.	9 o'clock.	12 o'clock.	3 o'clock.	Prevailing Wind.	REMARKS.
1	44°	48°	50°	W	Clear
2	43	44	49	E	Rain Clear
3	43	42	40	NW	Cloudy
4	36	38	40	W	Clear
5	42	45	48	"	"
6	41	44	49	"	"
7	40	46	50	S	"
8	45	46	42	W	"
9	38	43	45	"	"
10	33	40	43	"	"
11	35	40	47	SW W	"
12	35	36	38	W	"
13	35	39	41	NW	"
14	34	33	33	"	"
15	28	30	32	W	"
16	30	39	42	"	"
17	28	32	35	NE	Snow
18	29	31	32	"	Cloudy
19	35	36	36	"	Snow
20	36	38	40	"	Cloudy
21	39	41	40	W	"
22	38	41	43	"	"
23	38	40	44	NE	Drizzling
24	30	31	30	W	Clear
25	28	31	33	NE	Snow 3 inches
26	29	30	31	N	Clear and cloudy
27	32	34	35	NE	Clear
28	34	32	31	E	Cloudy
29	33	33	34	N	Snow 21 inches.
30	33	35	36	NE	"
31	36	38	40	W	Clear

## CANALS AND RAIL ROADS COMPARED.

Several articles have heretofore appeared in the progress of the Register, tending to exhibit the comparative merits of the two modes of improvement, by canals and roads. Information on this subject has been deemed of importance, and we have believed it one in which our citizens are deeply interested. A report has lately been sent to us from the State of New York, made by the Canal Commissioners to the Assembly of that State on the 16th of March, 1835, accompanied by the opinions of "three civil engineers, of experience in the construction of Canals and rail roads," which we now commence to lay before our readers.

## REPORT

*Of the Canal Commissioners on a resolution of the Assembly of the 23d February, relative to the cost of canals and rail roads.*

The Canal Commissioners, in obedience to a resolution of the Assembly, under date of the 23d ultimo, requesting them to report "at as early a day as conveniently may be, a statement showing the average relative cost per mile of canals and rail roads, the average relative expense annually of repairs and superintendence, and the average relative charges per ton, or other given quantity for transportation; and also, whether in their opinion, any, and what articles of produce, merchandise, or manufacture, can or can not, having a due regard to the saving of time, as well as other circumstances, be more advantageously conveyed on rail roads than by canals, with the reasons for their opinion, and such observations on the general subject of this resolution, as they may deem appropriate to guide the action of the Legislature in reference thereto," respectfully submit the following

## REPORT:

The subject submitted to the consideration of the Commissioners, is interesting in its character, and of some public importance. The comparative cost of constructing rail road and canals, the comparative cost of transportation, and the comparative expense of superintendence and repairs, are subjects which have occupied a large share of public attention; and respecting which, many speculative opinions have been advanced. At one period, the public were assured with some degree of apparent confidence, that rail roads would supersede canals; and it will no doubt, be recollected by many, that inquiries were made as to the probability of converting the Erie canal into a rail road.

Experience has gradually developed the relative utility of canals and rail roads for the transportation of property. We think the period is not distant, if it has not already arrived, when the superior advantages of a canal over a rail road, as a means of conveying property will be indisputably demonstrated.

It is believed that it will not be difficult to show, that the expense of transportation on rail roads, is very materially greater than on canals. In addition to this there are other important considerations in favor of canals.

A canal may be compared to a common highway, upon which every man can be the carrier of his own property, and therefore creates the most active competition, which serves to reduce the expense of transportation to the lowest rates. The farmer, the merchant, and the manufacturer can avail themselves of the advantage of carrying their property to market, in a manner which will best comport with their interest.

Much of the property which passes on the canals is carried by transportation companies; but the largest portion is carried by individuals and small associations.

The individual who becomes the carrier of his own property, has the advantage of paying nearly one half of the expense of transportation, in the regular course of his business; and the cash disbursements often do not much exceed the payment of tolls. To the farmer, the profits on return freight in many instances gives a full indemnity for the expense of taking his cargo to market.

On rail roads the proprietors must necessarily be the carriers; and this is the general practice.

It appears that in the State of Pennsylvania an attempt has been made to permit an indiscriminate use of rail roads. On this subject the Canal Commissioners of that State, in their last annual report, remark as follows: "Before quitting the subject of rail ways the Canal Commissioners take occasion to remark, that the experience of the past season has convinced them that these roads, either as it regards revenue, facilities to trade or general accommodation, will not answer public expectation, if thrown open like public highways, to be used indiscriminately. Every person who has paid the least attention to the transportation upon them since they were opened, must be convinced that an unrestrained and indiscriminate application of motive power is attended with danger, delays and interruptions. Safety, regularity and punctuality must first be secured, before those important links in our great chain of improvements can fully answer the purpose for which they were designed, and the board are decidedly of opinion that this desideratum is only to be obtained by the Commonwealth furnishing all the motive power, and directing its application."

There is some difficulty in furnishing an accurate comparative statement of the cost of constructing canals and rail roads. The character of the country in which a canal, or rail road is situated, and the manner in which they are constructed, have an important influence in determining their cost; and unless the prominent circumstances which have a bearing on this question are understood, it would be difficult to do more, than furnish an approximate estimate.

To furnish a statement of the actual cost of several canals, and rail roads, with a brief allusion to the prominent features which have a bearing on the question of cost, is the best evidence which can now be furnished, in answer to that branch of the inquiry.

The relative annual expense of superintendence and repairs, is not the subject of estimate on any fixed data; but must rest on experience. This expense would depend on circumstances which are hardly similar in any two cases. The character of the country, the permanency which is given to the work in its first construction, and the amount of business, governs this question to a great extent.

The Erie Canal was commenced in 1817, and completed in 1825. Every part of it has been in use 10 years, and some parts of it 15 years. In this period many of the structures of wood have been twice renewed, and all of them once. Several important improvements have been made, such as the widening of aqueducts, &c., and the banks on much the largest portion of the line, have been faced with stone and timber.—The great facilities which are furnished to accommodate the large trade which is done upon it, by removing bars and deposits in the bottom of the canal, guarding against breaches, their prompt repair when they occur, graveling the towing path, attendance at the locks, &c. &c. exceed the expenses which ordinarily occur on canals, and is much greater than would be necessary where a limited amount of business is done.

A statement of the average annual expenses for superintendence and repairs, from 1828 to 1835, will furnish the most accurate information which can be given in regard to this expense.

The annual expense of repairing rail roads has not yet been developed by experience.

The Manchester and Liverpool rail road was completed in 1830. The Baltimore and Ohio rail road, in 1831; and the Delaware and Hudson rail road, in 1829. These companies have severally given a particular statement of the actual annual cost for superintendence and repairs. But this expense will fall short of a true average after the lapse of time within which the wood work of these roads must be renewed.

The proprietors of these roads have furnished a detailed statement of the actual cost of transportation, independent of tolls or profit to the company; compared with the actual cost of transportation on the Erie canal, will furnish the best data which can now be given, of the relative expense of transportation on canals and rail roads.

The Commissioners have not had it in their power, since the receipt of the resolution, to which they are now replying, to investigate this subject with that care and attention which its importance demanded. One of the acting Commissioners is absent, on account of severe indisposition in his family, and another has been in feeble health. Under these circumstances, and with a view of giving the subject a speedy and careful examination, they called to their aid John B. Jervis, Holmes Hutchinson and Frederick C. Mills, Esqs. civil engineers, of experience in the construction of canals and rail roads. Their report, accompanied by several interesting tables, is herewith submitted.

The Commissioners have examined this report, and believe the general results to be correctly stated.— This report contains all the information which can now be given in answer to the several inquiries submitted to their consideration.

WM. C. BOUCK,  
MICHAEL HOFFMAN.

March 17th, 1835.

#### REPORT

Of John B. Jervis, Holmes Hutchinson and Frederick C. Mills.

To the Honorable the Canal Commissioners of the State of New York.

Gentlemen—

We have examined the question you submitted to our consideration, in relation to the relative cost of construction and repairs of canals and rail roads, and also the relative expense of transportation, and present in the following report, the facts and views we have been able to obtain. The importance of the subject compels us to regret, that more time could not consistently have been taken, to obtain further facts, and allowed us to carry the investigation into greater detail. We have felt compelled in a great degree, to confine ourselves to an exposition of prominent features, in the two methods of facilitating internal communication. We believe, however, the facts presented, and the exposition of the bearings of those facts, will be found useful, in leading to correct conclusions in regard to the question under consideration.

#### RAIL ROADS.

The utility of rail roads is materially, and in some respects, peculiarly affected by the ascent and descent that is overcome, and the relative amount of trade requiring transport in opposite directions. For instance, a rail road requiring transport only in one direction, would be most favorable with such a declivity in the direction of the freight, as would require the same power to move the loaded wagons, as would be necessary to return with the empty ones; and this declivity would decrease in cases requiring transport in both directions, and become level when the freight was equal.

In this country, it rarely occurs that freight is equal

in both directions; more frequently it is 2, 3 and 4 to 1. To obtain the most favorable gradation to the trade to be accommodated, it is essential that it be uniform, or nearly so; which the route would not often admit without too great expense, and in some cases would be impracticable. On important lines for general trade that have any considerable extent, there will from the character of the country, often require a level, and sometimes a small ascent in the direction of the greatest trade; and it would be a favorable compromise to exchange all acclivities and declivities for a level road. Though there would be exceptions, still it is believed a level road would afford a fair standard, in determining the general question of utility.

Below will be found a statement of the cost of several rail roads, and in some cases the cost of transportation.

It is to be regretted that more authentic information of a practical character is not in our possession. The authorities as well as the facts, are stated to show the weight which they are entitled to. In some important cases they are authentic; and these will be adopted as the basis of our conclusions.

#### Baltimore and Ohio Rail Road.

From Baltimore to Point of Rocks, 67  $\frac{1}{2}$  miles, by report of chief engineer, (October, 1832,) this section was stated to be nearly complete, and the cost \$29,193 per mile. In a document of second session 22d congress, No. 93, it is asserted this road had then cost nearly \$34,000 per mile: We have examined the subsequent reports of the directors and their officers, and find nothing to change the statement of \$29,193 per mile.

The grading of this road is done in a substantial and durable manner; over  $\frac{3}{4}$  of the superstructure is timber sills and rails, capped with an iron plate:  $\frac{1}{4}$  (or 26-100) is stone rails capped with iron plates, and 1-17 is timber rails on light stone blocks.

The cost of transportation for the year ending 31st September, 1834, as per report of superintendent of transportation, was for motive power and all other charges, (excluding repairs of road,) except interest and fund for renewal of wagons, \$62,348 57

Superintendent of machinery reports 1,000 wagons on the road; their cost is not given. They probably cost from \$150 to \$200 each; if on steel springs, the latter, otherwise the former; they may be estimated at \$150 each, which for 1,000, is \$150,000: interest on their cost, and to provide a fund for renewal, is believed should be at 25 per cent, which is, 37,500 00

Total cost of transportation, exclusive of tolls or profit, for 56, 120 tons, is 99,848 57

The average charge of the Company, per said report, is within a small fraction 4  $\frac{3}{4}$  cents per ton per mile, produces the sum of, 116,254 79

The ratio of receipts to expenditures is 1 to 0.85, and  $4.66 \times 0.85 = 3.96$  cents per ton per mile, as the expenses.

The expenses the previous year are stated by same report to have been higher: but as we have not the detailed statement, we cannot give the exact difference.

The rail road has ascents, descents, and curves, which affect the economy of transportation.

In regard to curves, this road may be considered as having more than is usual on rail roads, designed mainly for general trade.

All lines of rail road, of any considerable extent, will be curved more or less, according to the character of the country through which they are constructed. It is the first object to have it straight, and next, the lightest curvature the country will admit. The mini-

mum will therefore, be determined by local circumstances. While it is considered this road has more curvature than will occur as a general average, it is obviously impracticable to determine what this average may be. The chief engineer, J. Knight, of this (Balt. and Ohio) rail road, made experiments on the increased resistance produced by curves, which led him to the conclusion, that in a curve having a radius of 400 feet, the traction was increased 50 per cent. If locomotive engines were used, then loads would be regulated by the greatest resistance they had to overcome, on any part of the route; but a horse can increase his effort, for a short distance, which enables him on a road that has occasionally, sharp curves or ascents for moderate distances, to perform a greater average of useful effect, than can be obtained from locomotive steam power.—The freight business for this road is performed by horse power. The sharpest curves generally occur in short distances, intervening between straight lines and larger curves, and will not, therefore, affect the cost of transportation to so great a degree as if locomotive steam power was used. If we assume 10 per cent. of the resistance on a level and straight line, as the excess over a general average arising from extra curvature on this road, and apply it to the section between Parr Ridge and Baltimore, we shall not probably be far from its true influence on the cost of transportation.

The next, and most important question that affects the cost of this transportation is, the ascent and descent. The character of this road in relation to its elevations, seems to indicate the propriety of dividing it into sections, and applying on each, the power necessary, without regard to the other. The following divisions have therefore been made, to wit:

1st. From Baltimore to Parr Ridge, foot of 1st inclined plane—length, 40½ miles; ascent westward, 590 feet; descent, 23 feet; total, 613 feet; ascent averages 14.75 feet per mile.

2d. Embraces the 4 inclined planes that pass Parr Ridge, 1.94 miles; ascent and descent, 429 feet, viz:

No. 1, 2,150 feet, rise	$\frac{7}{26.75}$	= 80 ft.	} Total ascent 179 feet.
2, 3,000 ‘	$\frac{1}{30.12}$	= 99 ‘	
3, 3,200 ‘ fall	$\frac{1}{20.65}$	= 160 ‘	} Total descent 241 feet.
4, 1,900 ‘	$\frac{1}{23.38}$	= 81 ‘	
Total,			feet 420

Intermediate level, about 3½ miles.

3d. From foot of plain No. 4, to end of continuous declivity westward, 11½ miles; total descent, 285 feet; average, say 25 feet per mile.

4th. The remainder of road, to point of rocks and branch to Frederick, a fraction over 16 miles; descent westward, 169 feet; average 10.56 feet per mile, ascent westward, 131 feet.

Total rise and fall, 300 feet.

The ascent westward, for the 4 divisions, is 900 feet.  
The descent ‘ ‘ ‘ ‘ 718 ‘

Total ascent and descent, 1,618 ‘

By the report referred to, it appears the ratio of freight moving eastward to that moving westward, was nearly as 2 to 1; for calculation we therefore adopt this ratio.

It has been shown that the 1st division has an average ascent of 14.75 feet per mile. This ascent, however, is not uniform; in several places for short distances it descends westward, some portions are level, and the ascents are at rates varying between 2.64 and 37.48 feet per mile, excepting a short piece near the foot of inclined plane. They seldom much exceed 20 feet, except for short distances. The length of grades at

the higher rates of ascent is generally less than one mile, and alternate with those of medium rate; except near the inclined plane. In view of the character of this division, it is believed animal power will allow such variations, as to accommodate the varying resistance, with nearly as much economy as on a uniform ascent. If we calculate on a uniform ascent of 18 feet per mile, we shall not probably vary essentially from the true economy of the case.

It has been observed, the freight is as 2 to 1 in the opposite direction, being least westward. The weight of the wagons will probably be  $\frac{1}{3}$  of the gross load; and for computation, we may assume the wagon to weigh one ton; and consequently the freight eastward will be 2 tons and that westward 1 ton.

The resistance from friction is taken at 1-250 of the gross load, the velocity being low. On a level this will require nearly 9 pounds per ton, on an ascent of 18 feet per mile gravity will be 1-293 of the load, or 7.64 pounds per ton. The wagon and its freight going westward, makes a gross load of 2 tons; the resistance will therefore be  $9 + 7.64 \times 2 = 33.28$  lbs. To carry on a level road, a load which including wagons would be 3 tons, the resistance would be  $9 \times 3 = 27$  lbs. The road with a few exceptions, descends eastward or is level. The ascents are small and so near the eastern termination, that, in the average, less power would be required than on a level; but we require 33.28 lbs. to move westward, after providing for varied effort by the animal. Now, as a general result, we could not expect a more equal ratio of freight in the two opposite directions than in this case, and if 27 lbs. is required on a level, we have an excess of power to provide for the load moving westward, of  $33.28 - 27 = 6.28$  lbs., and as this will return with the opposite load, we have extra power for the two directions—12.56 lbs. more than required for a level road, or 23 per cent. extra. This added to the extra curvature of 10 per cent. raises the extra traction to 32 per cent. on this section. The cost of the moving power is nearly 2-5 of the total expense, and  $32 \times .40 = 14.80$ , say 15 per cent. the cost of transportation over a level road; and  $40 \times 25 \times .15 = 6.03$ , or equal an increase in the length of this division, of 6 miles.

2d division. The total ascent westward is, on the inclined planes, Nos. 1 and 2; their total length is 5,150 feet, and ascend at an average rate of one in twenty-eight and three fourths. It is obvious, the load moving westward will determine the expense of power, as that in the opposite direction on these planes will descend by its own gravity, requiring only the expense of breakmen to control its descent within a safe velocity, which may be done by part of the drivers, whose teams could be led back by others. In moving up this ascent, a horse would require 35 per cent. of his power to overcome the gravitating force of his body; but as he would be loaded only in one direction, and the length of either plane but little exceeding half a mile, it is believed to be a fair estimate to compute in this case, the useful effort of his power, as equal what it would be on a level. We have one ton of goods and one ton of wagon, making a gross load of 2 tons moving westward. The total resistance up the plane, will be 173 lbs., or 5.4 times greater than the load in the opposite direction, (3 tons gross,) would be on a level. The two planes are together, 0.97 miles in length. The ascent will make the extra resistance, equal  $5.25 \times .4 = 2.09$  miles.

The 3d and 4th planes descend westward; their total length is 5,100 feet, and descend at an average rate of  $\frac{1}{21.15}$ . For these planes, we must compute the power required to ascend them with the load moving eastward, which is 3 tons including wagon. The horse will require 47 per cent. of his power to overcome the gravitating force of his body up the plane; and though he will as in the case of the other planes, be loaded

only in one direction, still it is believed that 10 per cent. should be taken from his average useful effect in ascending Nos. 3 and 4. The resistance of 3 tons up these planes will be 344 lbs., equal 11.73 times greater than on a level, or including the loss in the effective power of the horse, equal 13.13 times greater.—The two planes are .96 miles  $\times$  13.13  $\times$  4 =  $4\frac{1}{4}$  miles extra length of transportation. The influence of the planes on this division, increases the moving power equal to what would be required for 17 miles of level road, and taking the moving power at 40 per cent. of the total expense of freight, a fraction over  $6\frac{1}{2}$  miles, entire cost of transportation.

3d division—Ascends eastward at the average rate of 25 feet per mile, varying from 9.76 to 52.80. The grades that have the higher rates of ascent are short, and in view of the small amount of labor required of the horses in the opposite direction, it will probably not vary materially from the truth, to compute the power at the average rate of ascent, or 1-211. A load eastward is 3 tons including wagons, and the resistance will be 58 lbs., equal 2.14 times that on a level; or for 11.25 miles, requiring extra moving power, equal what would be required for 12.82 miles on a level, or equal the total expense of transportation for  $5\frac{1}{2}$  miles.

4th division is quite of an undulating character; the ascent is greatest in the aggregate in the direction of the greatest trade, but the grades have a less rate of ascent, than in the opposite direction. The average ascent in the direction of the greatest trade, will be a fair basis of computation for the section. This is 1,500, and the resistance for 3 tons, (as before,) is 40.44 lbs or 50 per cent. greater than a level. For 16 miles the extra moving power is equal 8 miles on a level, or equal the total cost of transportation for  $3\frac{1}{4}$  miles nearly.

	Miles.
In the first division we have extra equal,	6
Second, ‘ ‘ ‘	$6\frac{1}{2}$
Third, ‘ ‘ ‘	$5\frac{1}{2}$
Fourth, ‘ ‘ ‘	$3\frac{1}{4}$
	<hr/>
	$21\frac{1}{2}$
	71

Total length of road is, — 92.12

The actual cost of transportation has been shown to be 3.96 cents per ton, per mile. To reduce this to our standard, we have the cost of transportation, exclusive of toll or profits, 3.05 cents per ton per mile, with freight as two to one in the different directions.

By report of superintendent, the moving power cost 1.08 cents per ton, per mile.

#### Repairs.

Year, ending October, 1833, \$444 per mile.  
1834, \$321

Average, for 2 years, \$382.50.

A road constructed mostly of timber will vary much in the cost of repairs for different years, and several are therefore necessary to obtain a proper average.

Cost of transporting passengers per mile, 1.98 cents, as stated in Hazard's Register of Pennsylvania, v. 15, p. 112.

#### Liverpool and Manchester railway.

In a statement published by Mr. Booth, the treasurer of the company, dated June 30, 1830, the expenditure up to that time, including an estimate, (the road was at this time nearly completed,) to finish some unimportant items of work, it appears the construction of the railway, exclusive of warehouses, wharfs, offices, engines, wagons and other items not connected with the construction of the road, cost £694,593 for 31 miles, equal £22,406  $\times$  4.80 = \$100,748 per mile.—There have subsequently, been heavy expenditures, not embraced in the account of repairs, but we are not sufficiently advised of their object to say, whether or not, any part of it belonged to the amount of the original construction of the road.

#### Repairs.

It appears from four semi-annual reports of the directors, the expense of repairs have been as follows, viz: Report of July, 1832, 1st January to 30th

June,	£7,331 0 6
January, 1833, 1st June to 31st December,	6,878 4 3
July, 1833, 1st January to 30th June,	6,714 9 3
January, 1834, 1st July to 31st December,	6,425 14 8

Total for 2 years, £27,349 8 8

Equal, for 31 miles,  $882 \times 4.80 = \$4,233$  per mile, which, for one year, is equal \$2,116 per mile, commencing about a year after the road was opened for business.

A table is given of the general expenses in the six months previous to that reported in July, 1832, in which the expenses of repairs is included with some other items. This aggregate sum is very nearly the same as reported in detail, showing there had been no material variation in repairs for the six months previous to that particularly reported.

#### Transportation.

The reports above referred to, embrace 4 semi-annual accounts for transportation, and one tabular view of transportation for 6 months previous, from which the following table is made.

The report of July, 1832, contains a statement of transportation for the two semi-annual terms preceding.

In the tabular account given by the directors, the maintenance of way and rate, taxes and omnibuses are charged to transportation; but in the following table, these are not included, as it is the design to exhibit the cost of transportation separate from other expenses; these items are given in the table of directors' reports, with others, but are separate in the general account.

From the reports of the directors and their statement of general accounts, it appears probable, the amount of repairs of wagons and coaches, includes the purchase of new ones when required, to supply the place of those that fail: the interest account is supposed to be interest on cost of locomotives, engines, coaches, wagons, &c.; there is no other item that embraces the interest on the outlay, and it is presumed this is intended. There is a charge for carting included with other items, and from the general account would appear to be about 6d per ton: we have not deducted this item, for the reason it was impracticable to determine exactly what it amounted to; and the question whether the interest account included the total interest on the outlay for the transportation department, with such allowance as would, beyond what was included in repairs, make the necessary renewals, being doubtful, we have thought a further reason for leaving it as it is. The table cannot, however, be far from the proper expense of transportation.

#### For Merchandize.

The lowest cost pr. ton is 5s 5d. = \$1.31, or pr. mile 4.22c.  
The highest 7s 2d. = \$1.72 5.55  
The medium or average of the table is 6s 1d.  
= \$1.46, or per mile, 4.70 cts.

#### For each Passenger.

The lowest cost is 1s. 7 $\frac{1}{2}$ d. equal to \$0.39 $\frac{1}{2}$ , or per mile, 1.28 cents.  
The highest cost is 2s. 4 $\frac{1}{2}$ d., equal to \$0.56 $\frac{1}{2}$ , or per mile, 1.82 cents.  
The average cost 1s. 11 $\frac{1}{2}$ d., equal to \$0.47 $\frac{1}{2}$ , or per mile, 1.53 cents.

Table B, contains the aggregates for one term of six months later than table A: it does not appear that transportation was lower for this term than previously, but on the contrary is confirmatory of the above average results; which may therefore, be viewed as based on three years experience.

TABLE B.—Showing the number of passengers, and the tons of merchandise, passing the whole length of the road; and also receipts and expenditures for the entire transportation, including the way and coal business, and that passing the whole length of the Liverpool and Manchester road.

No.	Passengers.		Merchandise.				Total.		Excess of receipts over expenses.	Ratio of receipts to expenditures.
	Expenses.	Receipts.	Tons.	Expenses.	Receipts.	Expenses.	Receipts.	£.		
Semi-annual report of directors, dated July, 1831, for 6 months, ending Decem-ber, 31, 1831.	—	—	—	—	—	—	—	—	—	—
Semi-annual report of directors, for 6 months, ending 30th June, 1832.	25,930	58,348	—	21,841	29,092	49,025	89,809	40,784	183 to 1	1
Semi-annual report of directors, dated Jan. 1833, for 6 months, ending 31st Dec. 1832.	174,122	21,997	40,044	57,174	22,413	30,436	46,658	74,706	28,048	1
Semi-annual report of directors, dated July, 1833, for 6 months, ending 30th June, 1833.	182,853	25,744	45,120	61,995	22,277	35,509	48,278	80,902	32,624	1
Semi-annual report of directors, dated Jan. 1834, for 6 months, ending 30th Dec. 1833.	171,431	24,746	44,130	68,384	26,447	38,149	52,900	86,071	33,171	1
Rail road Journal, vol. 3, 609, given as facts from report of directory of July, 1834, for 6 months, ending June 30th, 1834.	215,071	27,345	54,685	69,806	27,357	38,641	56,330	97,234	40,884	1
	244,326	—	50,770	77,528	—	44,014	60,092	94,784	54,692	1

NOTE.—It will be perceived the column of tons, only embraces that passing the whole length of the road, while the receipts and expenses on transportation include the way business.

TABLE A.—Showing the cost of transportation per passenger, and per ton of merchandise, for 31 miles on the Liverpool and Manchester rail road.

DISBURSEMENTS, &c.	Report of Jan-uary, 1832.		Report of July, 1832.		Report of Jan-uary, 1833.		Report of July, 1833.		Report of Jan-uary, 1834.		Average of five semi-annual statements.	
	Cost per passenger.	Cost pr. ton, of merchan-dize.	Per passen-ger.	Per ton of merchan-dize.	Per passen-ger.	Per ton of merchan-dize.	Per passen-ger.	Per ton of merchan-dize.	Per passen-ger.	Per ton of merchan-dize.	Per passen-ger.	Per ton of merchan-dize.
Disbursements in the merchandize department, consisting of portrage, sala-ries, carting, stationary engine, disbursements, &c. &c.	—	4 6½	—	4 0	—	3 5	—	3 7½	—	3 9½	—	3 10½
Disbursements in the coaching department, comprising portrage, salaries, repairs, &c. &c.	0 7	—	0 7½	—	0 6½	—	0 9½	—	0 9	—	0 7½	—
Locomotive power account, proportioned according to the number of trips of 30 miles in each department, comprising repairs of engine, wages, coke, &c.	0 6½	1 11	0 7½	1 7½	0 10½	1 2½	1 0	1 6½	0 8½	1 6½	0 9	1 4½
Sundry disbursements proportioned according to receipts, as between charac-try and merchandize, comprising police and gate establishment, and general office.	0 1½	0 3½	0 2	0 4	0 1½	0 3½	0 2	0 3½	0 2½	0 2½	0 2	0 3½
Interest on loans and chief rents, proportioned according to the amount of pro-fit in each department, calculated exclusively of these items of disbursement.	0 4½	0 4½	0 6½	0 8½	0 4½	0 7	0 5	0 6½	0 4½	0 4½	0 5	0 6½
Total disbursements.	1 7½	7 2½	1 11½	6 7½	1 11½	5 5½	2 4½	6 0½	2 0½	5 11½	1 11½	6 1

Having ascertained the cost of transportation on the Liverpool and Manchester rail way, we now proceed to reduce the cost of freight to our standard of comparison; a level road.

#### *Inclined plane at Liverpool.*

Length, 1.12 miles; rise 1.48. The extra cost of the transit for moving power, taking the average from two semi-annual reports, is 1.80 cts. per mile, 2.02 cents for the total length, per ton; equal, for total cost of transportation, to 0.43 of a mile, on a level.

#### *Sutton and Whiston Planes,*

Are each  $1\frac{1}{2}$  miles long, and have an inclination of 1.96 or 55 feet per mile. They incline in opposite directions, and therefore, if the trade was equal in each direction, only one plane should be calculated as affecting the total transportation; as it is obvious, a load passing in either direction, would only require additional power to ascend one plane. In the reports of the directors they give the total freight, not distinguishing between the different directions; and we are left to determine, from the general character of the trade, whether any and what difference there was. It appears that not more than 1.6 of the tonnage between the two cities passes on the rail way; and we, therefore, are led to infer the rail way takes the lighter character of freight, which is probably about equal in both directions; and our computation of cost is made on this basis.

This road being worked entirely by locomotive steam power, except the inclined plane at Liverpool, which has stationary power, our computation is made accordingly.

In ascending the plane the resistance will be 1.225, (friction) + 1.96, (gravity,) = 1.67, or ratio to a level of (3.35 to 1,) or a little more than three and one-third to one. The power of the engine will be reduced by its gravity, and that of its tender to 70 per cent of its power, on a level; or to make it equal its power on a level, it must be increased to 142 per cent, which makes the cost of moving power to ascend the plane, as compared with a level, as 4.75 to 1, or four and three-fourth to one. The extra moving power to ascend this plane over a level, is equal to the transit of 5.62 miles on a level. The moving power is 26 per cent of the total transportation, exclusive of the interest account in which the items of moving power and wagons are blended; this will not be less than 4 per cent, making the total cost of moving power at least 30 per cent.—The extra cost of the planes are therefore equal 1.68 miles entire transportation on a level.

The greatest inclination on any part of this rail way, except the inclined planes above mentioned, is 1.880 or 6 feet per mile. It is presumed the ascent of this inclination will regulate the load of the engines, on which the resistance will be  $1.225 + 1.880 = 1.179$ , or ratio to a level of 1.25 to 1. The power of the engine will be reduced by its gravity, and that of its tender to 97 per cent, or its power must be increased over what would be required on a level, say to 104 per cent, making the cost, as compared with a level, as 1.30 to 1. This will be applicable to 27 miles of road, on which the extra cost for moving power is equal 8.1 miles, or for entire transportation equal 2.43 miles.

The influence of the elevation on this rail way in increasing the cost of transportation over that of a level is  $(43 + 1.68 + 2.43 = 4.54)$ , a little more than four and a half miles of level way. The actual average cost of transportation for 31 miles was found to be (47,) nearly four and three-fourths cents per ton, which, reduced to a level road, we find to be (4.07,) over four cents, per ton per mile.

An interesting fact is developed in this investigation, in relation to the comparative cost of transportation on inclined planes by stationary and by locomotive steam

engines. The plane at Liverpool is worked by stationary steam power, and has an inclination of 1.48 or 110 feet to the mile. The Whiston and Sutton planes, worked by locomotive steam power, have an inclination of 1.96 or 55 feet in a mile, being exactly half the inclination of the Liverpool; yet the cost of moving power on the Liverpool to Whiston or Sutton is as 1 to 2.90; showing that locomotive power, for an ascent of 55 feet to the mile, is about three times the expense of stationary power for a plane 110 feet to the mile, calculated for equal horizontal distances. It should be observed, in relation to this fact, that economy of stationary power on inclined planes, depends materially on the amount of business. In this case it was about 500 tons per day.

#### *Baltimore and Washington rail road.*

This road commences at a point in the Baltimore and Ohio rail road, about 6 miles from Baltimore, and extends 30 miles to the city of Washington. Its operations are conducted by the Baltimore and Ohio company. In their report of October, 1833, they state the estimated cost at a little over \$53,000 per mile, for 26 miles. The estimate for the whole 30 miles is given at \$50,000 per mile, in a report on canals and rail roads, as presented, 25th June, 1834, to the House of Representatives in Congress. In their report of October, 1834, the directors say the graduation and masonry, (the part of the expenditures liable to the principal contingencies,) is nearly completed; they make no allusion to the probability of the work costing more or less than the estimate; and as it would be natural to do so, if any important disagreement was probable, it is inferred the road would cost the estimated sum; and being so near completed we have thought it proper to put it in the table. This road has iron rails on stone foundation, except the embankments, which have timber foundation.

#### *Columbia rail road.*

This rail road is 82 miles long, and per last report of Pennsylvania commissioners, the road has cost, including an estimate for an unimportant amount of unfinished work, \$40,450, per mile. It has mostly iron rails, partly on stone and partly on timber foundation.

#### *Alleghany Portage rail road.*

This rail road is 36 miles long, and per report of Pennsylvania commissioners, has cost, including a small estimate for unfinished work, \$47,977, per mile. It has iron rails for a fraction over two-thirds its length, about half of which are on stone foundation, and the balance on timber; nearly one-third is timber road with iron plates.

#### *Mohawk and Hudson rail road.*

The main stem of this road is 16 miles in length. It has timber rails with iron plates, about half of which are on a stone foundation, and the other half on timber. Cost per mile of double road, \$38,107, per company books. (They have also about  $3\frac{1}{2}$  miles of single road in branches that cost \$15,847 per mile.)

Actual cost of transportation for freight by locomotive and stationary steam, 3.5 cents per ton per mile. All the ascent for the greatest trade, (being as 3 to 1,) is overcome by one stationary engine, which does not materially enhance the ratio of cost over a level, taking the whole road. Experience has been quite limited on this road, and considering that the ratio of trade in different directions, in connection with the facility of overcoming the principal elevation by stationary power, would not materially increase the cost of transportation over a level, it has not been thought important to reduce it by computation. The cost of transporting passengers has been 1.7 cents per mile.



*Saratoga and Schenectady rail road.*

This rail road is 22 miles long. It is constructed with a timber rail, capped with an iron plate on timber foundation, except about three miles that has a light stone foundation. This road has a single track; it cost, per report of directors, November, 1832, \$11,010 per mile, exclusive of building, &c.; to make a second track of the same character, would cost \$6,000, making the total cost for double road \$17,010 per mile.

*Delaware and Hudson Canal Company rail road,*

Is 16 miles long, has 5 mile of double and 11 miles of single track. The valleys on this road were generally bridged with timber. The road is timber with an iron plate. It cost originally, including stationary engines, about \$10,500 per mile, (the exact amount not known.) To have made it double would have raised the expense to \$14,600 per mile; average annual repairs for four years is \$623 per mile. Transportation when the business is at 250 tons per day, is 4 cents per ton per mile, and when 500 tons per day, is 3 cents per ton per mile. This arises mostly from the cost of operating the planes, which is nearly the same in both cases.

The ascent of this road (835 feet) is overcome by five stationary steam engines, working on planes whose total length is 2½ miles. The cost of motive power for 500 tons per day, averages essentially the same as it does for horse power on a level, having the same in horizontal length. From the summit the principal descent is effected by three self-acting engines, so arranged that the loaded wagons draw up the empty ones; and the balance of the declivity is advantageously arranged for a descending trade. The economy in the use of stationary steam power, arising from the cheapness of fuel, and the great regularity which may be obtained in a coal business, and the comparatively small amount of agencies to conduct the business, leave no doubt on our minds, that transportation is effected on this road as cheap per ton per mile as a general business could be on a level road.

*New Castle and Frenchtown rail road,*

Is 16 miles long; timber rail capped with iron plate, about one-third on light stone foundation and the remainder on timber; cost \$30,000 per mile, (see report of committee on roads and canals to Congress, January 25th, 1834.)

*Camden and Amboy rail road.*

The part extending from Amboy to Bordentown is 33 miles in length, is believed to be entire iron rail, partly on stone and partly on timber foundation; cost (as per congressional report above mentioned) 30,000 per mile.

*South Carolina rail road,*

Is 130 miles long; timber rail capped with an iron plate. This road is built on piles; no embankments made in the grading; cost about \$7,000 per mile. It is not known whether it is a single or a double road, but believed to be mostly single track.

There are several important rail roads in the United States, which we should have been gratified to have added to those above given. But we have not the information in relation to them, that would enable us to derive any practical advantage. There are others that we have not thought proper to introduce in a question that relates to the general utility of rail roads as public thoroughfares: they are roads made mostly for local objects, or for short distances, where the surface of the ground is nearly level, and the road made to conform nearly to the natural level or inclination, and very little expense incurred to remove those irregularities in the surface, which in a road of any considerable length and importance, are generally encountered to obtain an economical grade: and the superstructure of such roads are usually made in an imperfect manner, not calculated to serve the purpose of accommodating an important general trade.

In the roads described, it is believed a fair view may be obtained of the general question of cost. In their graduation some have been of an expensive character, to wit: The Baltimore and Washington, Allegheny Portage, the Columbia, Mohawk and Hudson, and a part of the Baltimore and Ohio, though on the average the latter cannot be much above a medium: the Camden and Amboy, and the New Castle and Frenchtown rather below a medium, and the Saratoga as very favorable. The South Carolina road having been placed on piles, excavation has been avoided as much as possible, and embankments omitted altogether, by which the expense of grading has been very little. The general character of the superstructure has been stated; and their rails, or the foundation of the rails appear to be, to a great extent of timber.

The superstructure of rail roads when composed of timber with the rail capped with an iron plate will cost, for a double track, from \$6,000 to \$10,000 per mile, according to the value of timber and the stability given to the road; (this is exclusive of grading.) The cost on the Baltimore and Ohio, for this kind of road, was \$8,852 per mile. When composed of iron rails, laid on stone foundations, the cost will vary from \$18,000 to \$25,000; according to the convenience in obtaining stone, the extent of the ballasting, and the weight of rail that may be adopted; the probable average may be \$22,000 per mile. The difference then, between a medium of the two kinds, is \$14,000 per mile. To have adopted the iron rail on a stone foundation in the roads mentioned, would have materially increased their average cost. But in the first construction, it is usual, even when iron rails are adopted, to put down a timber foundation to support them on the embankments, until the embankments have time to become fully settled.

The first rail ways in England, were constructed of timber without any iron. The timber being found to wear too rapidly under the wheel, the iron plate was then put on. From this rule beginning in rail roads, their advantages began to be developed; and experience soon suggested improvements. Hence we find the wooden rail soon abandoned, even in the coal districts. Cast iron rails on a stone foundation followed timber; and now wrought iron is generally used in preference to cast iron. These remarks are introduced to show the result of experience in England. In this country, timber will doubtless be used to a greater extent, and for a longer period, than it was in England.—The cheapness of timber, the want of capital, and the limited amount of business in many places, will operate as causes to produce this result. We already observe, however, in this country, a departure from the use of timber rails on several important rail roads. Among those who have critically attended to this subject, there is probably very little difference of opinion, in regard to the most suitable material for rails and their foundation, when an extensive business may be anticipated, and particularly where a high velocity is an object. The Baltimore and Ohio rail road company, after an experience of several years with timber rails, have come to the following conclusion, as appears in their last annual report: "In the construction of the Washington road, the board have had regard to its durability, not less than to making it a source of immediate profit to those interested in the undertaking. The experience of the main stem, has conclusively shown, how important it is, to avoid the expense of repairs of the rail way, which not only materially affect the revenue, but occasion constant interruption and inconvenience to the travel on the road. True economy consists in constructing the road, in the first instance, so as to obviate the necessity of frequent repairs, and to enable the motive power used in transportation, to be employed to its fullest effect, without the fear of injury to the rails or bridges over which it passes in the performance of its daily work."

Timber is found to be less durable in a rail road than in almost any other situation. The action of the carriages tend to open the pores of the timber, which renders them more liable to imbibe moisture; all horizontal joints are much exposed under this action, and particularly that under the rail plate. There is, no doubt, situations where timber may be advantageously adopted. The cheapness of this article, the scarcity of stone for foundations, the scarcity of capital, limited extent of business, and the experimental character of the particular investment, will often present arguments in favor of its adoption. At the same time, we are fully of the opinion, that all rail roads, which constitute important avenues of communication, the period is not distant when timber rails will be wholly abandoned for iron.

The question in relation to the average cost of rail roads, it will be difficult to determine, as the graduation will be very different at different places. The table given, of the cost of several rail roads, excluding the Liverpool and Manchester, would afford an average of \$30,393 per mile. Had all these roads been constructed entirely with iron rails and stone foundations, their average cost would probably have been between \$35,000 and \$40,000 per mile. Taking all the road roads, designed to accommodate a large general trade, that have been constructed in this country, and add to their expense what would be required to complete an iron rail road with stone foundations, we believe the cost for a double road would not fall below \$35,000 per mile; and to reduce the same to a timber road of the best character, would not be less than \$25,000 per mile. The grading in both cases, is supposed to be done in a permanent manner. We are aware of the fact, that rail roads, in some instances, have been made for much less; but for the reasons before given, we do not believe them entitled to a place in this examination, which is designed to investigate the utility of rail roads as a means of general intercommunication of trade. There is no doubt, many situations where the favorable formation of the country, and the facilities for obtaining materials, will reduce the cost below the amount stated above, and the less expensive road may be sufficient for the trade to be accommodated. But there will be others that will be more expensive, as experience has fully demonstrated; and our object is to reach an average result for the accommodation of a general trade, where expedition, regularity and economy in the moving power will be important. It should be observed in relation to this question, that the cost of a rail road will depend materially on the amount of tonnage, and the speed it is necessary to maintain. This arises from the economy of motive power; for instance, where a small amount of business is to be accommodated, it will be economy to apply greater motive power, and avoid expensive graduation; on the other hand a large amount of trade, will induce greater expense in bringing the lines of graduation to the most favorable standard for economising this power.

#### *Remarks in relation to repairs on Rail Roads.*

Experience on this point is yet quite limited. We have the account of the two years on the Baltimore and Ohio road, four years on the Delaware and Hudson company road, and four semi-annual statements of the Liverpool and Manchester road. We have also, in relation to the latter, a general statement of the half year preceding and the half year subsequent to the four full reports, from which we are led to infer that no material variation occurred for three years. The average of the three roads of \$1,040 per mile per annum.

There is a great difference in the annual expense of repairs for these roads, which suggest the propriety of examining into the cause.

The moving power on the Baltimore and Ohio, and also on the Delaware and Hudson company's road, ad-

mitted for freight, only a moderate speed, probably seldom exceeding 4 miles per hour, and nearly the same amount of tonnage was conveyed on each: on the latter, no passengers are carried; on the former, the passengers constitute about half the business.

The Baltimore and Ohio road has less timber in its structure, though it has a large majority of timber road. The Delaware and Hudson Company road is about  $\frac{3}{4}$  single track, and considering the passenger business has not over half the use, and still its repairs are more than 50 per cent. higher. Two years with a moderate amount of trade, on a timber road, would not give a fair average of the cost of repairs, and the condition of the two roads at the end of the year, in regard to the age and durability of their timber, may be very different. We are, therefore, led to conclude, that further experience will show the repairs on the Baltimore and Ohio road, as the business increases, to be greater than they have hitherto been.

The Liverpool and Manchester road has cost over five times as much for repairs as the Baltimore and Ohio, and over three times as much as the Delaware and Hudson Company road. The Liverpool road was made in the most substantial manner, with very little curvature. The Baltimore road is very much curved, which increases the expenses of maintaining the parallelism of the rails. The statement of the cost of repairs and maintenance by the directors of the Liverpool road is very explicit, and continued for successive terms with very little variation; leaving no ground to misunderstand the subject. The amount of business on the Liverpool has been from three to four times as great, as on the Baltimore for equal terms of time; and the velocity of travelling both with freight and passengers, has been also much greater on the former than on the latter. In view of all the facts we have obtained, we are led to the conclusion, that the amount of business, and the velocity of travelling, has a material influence on the question of repairs. In the last report, the directors of the Liverpool road, they allude to the expenses of maintaining their road on the Whiston and Sutton places, in consequence of the high velocity which the engines and wagons often obtain in their descent; and propose to lay heavier rails to guard against this inconvenience. In a report recently made to the directors of the London and Birmingham rail way, by R. Stephenson, (late engineer of the Liverpool road,) on the propriety of adopting the undulating plan; he urges, as an objection of this plan, the injurious tendency of the high velocities obtained in the descents to the road and particularly to the locomotive engine, as a reason that he considers conclusive against it.

The repairs of a rail road composed mostly of timber will generally be much less for two or three years after it is put into operation, than the average for a term of ten or fifteen years. Our experience is limited in this branch of the investigation. but from the facts we have obtained, we are led to the conclusion, that the average expense of repairs for a road, designed to accommodate a large general trade requiring a high velocity, will not be less than that stated as the average of these roads, viz: \$1,040 per mile per annum.

#### *Transportation on Rail-Roads.*

The cost of transportation (reduced to a level road,) on the Baltimore road, we have found to be 3.05 cents per ton per mile, and 4.07 cents per ton per mile on the Liverpool road. In the former case, it is done by horse power, in the latter, by locomotive (except on one plane,) steam power. The ratio of cost of motive power to the entire cost of transportation is for the Baltimore road as 4 to 10; and for the Liverpool road, as 3 to 10. It, therefore, appears, that the Liverpool road, with 10 per cent less ratio in cost of motive power, (which makes the motive power nearly equal on the two roads,) cost one third more for entire expenses of transportation. If our accounts can be relied on as pre-

senting accurate results, it would appear highly probable the extra expenses in repairs and management of the business, was incurred in consequence of the greater speed maintained. Some abatement should doubtless be made, for the ratio of difference in expense of loading and unloading, which, in consequence of its being shorter, would bear heavier on the Liverpool road, than on the Baltimore. The accounts for the Liverpool transportation are presented in much detail, and are very satisfactory in their character. Those for the Baltimore road are not given in as much fulness and detail, but we have no reason to doubt their accuracy. It further appears, that horse power is a little more expensive for motive power, at a low velocity, than locomotive steam, at a high velocity, as compared for the two roads. But this would not be the case if the power was reversed for the two roads, as the short ascents on the Baltimore road would greatly depress the economy of steam power. The average cost of transportation on these two roads, when reduced to a level, is 3.56 cents per ton per mile. This allows no profit or toll; the cost stated for the Mohawk and Hudson road is 3.5, and for the Delaware and Hudson Company's road is also 3.5 cents per ton per mile, as the nett cost. It may, therefore, be considered that experience thus far has settled the cost at  $3\frac{1}{2}$  cents per ton per mile, on a level road.

It has been shown in this investigation, that where locomotive steam power is used, it is important to its economy, to have all the inclination reduced to a uniform angle, and the curves to a uniform radius, otherwise the traction that occurs on the sharpest curves, and greatest ascents, will determine the load of the engine. It is obvious that the load of the engine must be regulated by its ability to overcome the greatest resistance that occurs on the road over which it passes, unless extra power is stationed on the line to aid in passing ascents: the inconvenience of stationary power would prevent a resort to this method, unless the increased power required, was considerably greater than was generally necessary on the route travelled. This consideration is highly important where a large general trade is to be accommodated, and accounts for the great expense that is often encountered to bring the grade to the most favorable standard.

The cost has been shown to be  $3\frac{1}{2}$  cents per ton per mile on a level, and as rail roads are not often entirely level, it has been thought proper to a full understanding of the subject, to present a statement, showing the comparative economy in motive power, by locomotive steam engines on roads of different inclinations. In the calculations, the engine is assumed to weigh  $6\frac{1}{2}$  tons (13,000 lbs.) with 7,000 lbs. on its working wheels; adhesion at 10; the weight of the tender at 7,000 lbs.; resistance from friction  $\frac{1}{25}$ . The load carried is exclusive of the tender, and includes freight and wagons.—Two thirds of the gross load will be tonnage goods.—

On a level the gross load will be,	75.29 tons.
On a road or section having an ascent of 10 feet per mile,	49.53
On a road or section having an ascent of 20 feet per mile,	37.35
On a road or section having an ascent of 30 feet per mile,	27.24
On a road or section having an ascent of 40 feet per mile,	20.22
On a road or section having an ascent of 50 feet per mile,	17.04
On a road or section having an ascent of 60 feet per mile,	13.92
On a road or section having an ascent of 70 feet per mile,	11.31

In the load on a level, we have 50 tons exclusive of wagons, taking the cost of motive power at 40 per cent of the entire cost of transportation; the total cost on the level being 3.5 cents.

The total cost on an ascent of 10 feet per mile is per ton,	4.20 cts.
The total cost on an ascent of 20 feet per mile is per ton,	4.90
The total cost on an ascent of 30 feet per mile is per ton,	5.93
The total cost on an ascent of 40 feet per mile is per ton,	7.28
The total cost on an ascent of 50 feet per mile is per ton,	8.19
The total cost on an ascent of 60 feet per mile is per ton,	9.66
The total cost on an ascent of 70 feet per mile is per ton,	11.41

There are engines of a larger size than the one assumed; but it is the most approved at this time, in reference to the weight of engine, and the weight of the working wheels. This however is unimportant, as the comparison will not be at all affected by varying the power of the engine. the ratio between a level and the ascents will remain the same notwithstanding.

(To be concluded.)

READING, March 31, 1835.

To the Editor of the Commercial Herald.

As you have turned your attention and that of the Public, through the medium of your valuable paper to the internal improvements of the State, I now send you the original MSS. of the proceedings of the first meeting held in relation to the improvement of the Schuylkill. In 1813 when that meeting was held, the prejudices of the people through this section of country were absolutely insurmountable—Canals through a farm, the Schuylkill dam'd up, descending trade during high water obstructed, seemed to nerve every heart to determined opposition, and it was in vain that the enlightened amongst us, endeavoured to allay this feeling of hostility.

The forbearance and prudence of the Schuylkill Navigation Company, together with the large sums of money disbursed along the line, eventually in a great measure neutralized those angry opponents to the measure.

The opinions then entertained by this meeting, show how very far they were from foreseeing the immense advantages of that improvement. When speaking of the use of Coal, they say the Coal mines will afford cheerful and comfortable fires to the citizens of Reading, Philadelphia and perhaps New York.

It may well be said, improvements in this country are so rapid that before their advantages can be anticipated, they are enjoyed.

#### NAVIGATION OF THE RIVER SCHUYLKILL.

At a numerous assemblage of the citizens of Schuylkill County, at the house of Mr. A. Reifschneider in Orwigsburg, on Tuesday the 13th of December, pursuant to public notice, Dr. J. McFarland was appointed Chairman, and George Dreibelbis, Secretary of the meeting.

In an appropriate address from the Chair, the objects of the meeting were distinctly exhibited, and after a fair discussion and mature deliberation on them, the following resolutions offered by James B. Hubley, were ascertained to convey the united sentiments of all present, and received their unanimous approbation.

Resolved, That this meeting feel a lively interest in the measures adopted by their fellow citizens in the lower counties and in Philadelphia, for the improvement of the Navigation of the River Schuylkill.

That every project which is intended to supply our countrymen with articles before of foreign importation, is calculated to strengthen our Independence and ought to; and we are persuaded will be attentively listened to by the Legislature of Pennsylvania.

That at a period when our foreign commerce is destroyed and the capital employed in it, may be advantageously turned to Domestic Trade, all Internal navigation will be carefully encouraged, and when such navigation will effect an interchange of products of great necessity as well as of comfort, it will merit a liberal patronage from our State Government.

That the opening of the Schuylkill up to Mill Creek, or even higher, is an undertaking so clearly practicable, and so highly beneficial to private as well as the public interest of the state, that should even the period of its accomplishment be unhappily prolonged, it must eventually arrive, and none can be more favorable than the present.

That should this river be rendered navigable it requires no efforts of imagination to perceive the productions of the interior of the state of New York, borne along its channels: and the products of this county, finding their way into the capital of that State.

The Plaster from Onondago and the borders of the Cayuga, will be seen like the fertilizing Nile, producing abundance in our soil.

The Wheat trade which hitherto has been enjoyed but partially, and at seasons will become a constant source of wealth to our citizens: perhaps even the salt which is manufactured in the central part of the State of New York, may afford us supplies in times of scarcity: above all our extensive coal mines, whilst they will afford cheerful and comfortable fires to the citizens of Reading, Philadelphia and perhaps New York, will together with our lumber and iron become inexhaustible sources of prosperity to the inhabitants of Schuylkill county.

Resolved, Therefore, That we will cordially co-operate with our fellow citizens of Berks, Montgomery and Philadelphia, in endeavouring to procure the passage of a law to ensure the success of this useful undertaking, on such principles as will best accord with the interests of this county as well as the public utility.

Resolved, That to effect this interesting object the following persons be a Committee of Superintendence, viz: Dr. J. McFarland, George Dreibelbis, John Pott, D. Graeff, J. Krebs, Jer. Reed, J. Hughes, Theo. Hughes, A. Reifschneider, J. Kepner, W. Green, G. Rahn, J. Old, D. Yost, B. Kepner, J. Huntringer, H. Boyer, H. Hesser, A. Fertig, J. Hoch, C. Kerchner, C. Wagner, G. Orwig, Jac. Reed, D. Focht.

Resolved, That this Committee be requested to circulate for signature such memorials to the Legislature as may be consistent with the views of this meeting.

Resolved, That the following persons be a Committee of mission to wait on the members of our Legislature at their present session, and to request the passage of such a law, as is above contemplated, viz: Dr. James McFarland, John Pott, John Hughes and George Dreibelbis and that they be also a Committee of Correspondence to communicate with such other committees as may be appointed on the subject.

Resolved, That the proceedings of this meeting be signed by the Chairman, attested by the Secretary, and published in the Reading papers, and Editors of other papers who are favorable to the project are also requested to give them an insertion.

JAMES MCFARLAND, Chairman.

Attest by

GEORGE DREIBELBIS, Sec'y.

In Vol. II. of the Register, page 118, will be found a memorial presented to the Legislature in 1791—by "The Society for promoting the improvement of ROAD AND INLAND NAVIGATION,"—furnishing estimates for different routes, by clearing the navigation of certain waters. In this the "estimate of the expense of clearing the navigation from Philadelphia to Pittsburg," by the Schuylkill, Tulpehocken, Quitapahilla, a canal of 15

miles to Swatara, by this last to Susquehanna, Juniata to Huntingdon and Poplar run, then a portage to Canoe place on Conemaugh of 18 miles, then down Conemaugh to the mouth of Stoney creek, then down Conemaugh and Kiskeminetas to the Allegheny River and down to Pittsburg, in all, 426 miles,) was only £40,116 2 0. From tide water on the Schuylkill to Reading, the estimate by David Rittenhouse and others, was £1,147 0 0. Other routes and estimates for connecting the waters of the State with those of New York will be found in the same article. The whole is a curious document, and will prove interesting, as exhibiting the enlarged views of the Society at that early day, on the subject of improvement, although a different and much more expensive system has been adopted.

#### MESSAGE OF THE GOVERNOR.

Extract of a letter, dated

HARRISBURG, March 21, 1835.

Dear Sir.—Accompanying I send you the copy of a Message received to day from the Governor. The subject of it appears to me to be one of high importance to the commerce of Philadelphia. The effect of the improvement will be to tap the commerce of New York—even that which passes over the Public Improvements now made and her new rail road along the Pennsylvania Line to the Lake when made.

*To the Senate and House of Representatives of the Commonwealth of Pennsylvania.*

Gentlemen.—I have received from the Secretary of the War Department, several communications growing out of a Resolution of the House of Representatives of the United States of the 23d of January last, "directing him to forward copies of the Report and Profile of Major Bache's survey of a route of a rail road from Williamsport in Pennsylvania to Elmira in the State of New York;" to the Governors of Pennsylvania and New York with the request that they lay the same before the Legislatures of their respective states," copies of which, together with the documents accompanying the same will be laid before you. The importance of the contemplated improvement, and the advantages which must result from its completion, to the citizens of those portions of the respective States through which it will pass, as well as to the respective States, are made so manifest by the accompanying documents that any attempt on my part to enlarge upon them, would be entirely superfluous. I shall content myself, therefore with a single remark, that the practicability of the enterprise will be found, by an examination of the survey and report of Major Bache, to be unquestionable, and that the commerce it would open between the two States if completed, and the transportation it would invite in the interchange of the coal and iron of Pennsylvania, for the plaster and salt of New York, independently of the carriage of other products of the respective States upon it, would, there is reason to believe, more than justify its construction.

The papers and documents, however, are transmitted to the General Assembly for their examination and candid and impartial consideration. GEO. WOLF.

HARRISBURG, March 21, 1835.

\* For some documents in relation to this road, see Register Vol. ix. pp. 18, 89, Vol. x. p. 246.

Printed every Saturday morning by WILLIAM F. GEDDES, No. 9 Library street.

The publication office of the Register has been removed from Franklin Place, to No. 61, in the Arcade, Western Avenue, up stairs.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.--NO. 16.

PHILADELPHIA, APRIL 18, 1835.

No. 380.

## INSTRUCTION OF THE BLIND.

*Second Annual Report of the Managers of Pennsylvania Institution for the Instruction of the Blind. Located in Philadelphia. March 2, 1835.*

The Board of Managers, in presenting to the contributors their *Second Annual Report*, have the happiness to assure them of the continued success of the undertaking—of the rapid advancement of the pupils in learning, in the mechanical arts, and in music—of the excellent moral discipline which has been preserved—and of the health and happiness which have been enjoyed in the Institution, under the vigilant and affectionate care of its Principal and Matron.

Eleven pupils have been admitted during the year;—one left the Institution in bad health, and soon afterwards died at his home. We have now twenty-one under our care, of whom nine are females. Eighteen are from within this state, one from the State of Delaware, one from Virginia, and one from South Carolina.

Since the first Report, the Board have secured the services of Mr. J. B. Stout, as Assistant Teacher in the English branches; of Mr. A. Schmitz, as Instructor of Music; and of John Roxbury, a blind man from the Edinburgh school, as Teacher of the mechanical arts. The Board are happy to concur with Mr. Friedlander, in expressing their entire satisfaction with the manner in which the various departments have been filled.

The Annual Examination on the 23d of December, and a Concert on the 19th of February last, gave evidence of the improvement of the pupils in the English branches and in music. The German language is now taught; and it is expected that a course of Mathematical studies will soon be commenced. But, as the great majority of the pupils are poor, and dependent for their maintenance and education upon charity, it is particularly desirable that they should carry with them from the Institution, the means of supporting themselves hereafter. It is therefore, very satisfactory to state, that several handicraft arts have been added to those formerly taught; and the baskets, mattresses, door-mats, rugs and twine, made in the institution; are such as would command a ready sale; that several of the girls knit and sew with great neatness; and that some other handicrafts will soon be introduced.—Want of room for workshops, necessarily limits the operations of the pupils in the handicraft departments.

To call the attention of the inhabitants of this State to the subject of the Blind, and to announce to the afflicted in all districts, the advantages of our Institution, the Board not only sent its Circulars, and the necessary instructions for applicants, into all the counties; but induced the Principal, with one of the pupils, to make a very extensive tour during the month of July last. The exhibitions of the acquirements of our pupils excited a lively interest in all who witnessed them; but the applications for admission, which were anticipated as a consequence, have not been numerous from the interior of this State.

Shortly after the return of Mr. Friedlander, he accepted (with the approbation of the Board) an invitation from the citizens of West Chester; and visited that

town, with twelve of the pupils, whose examination excited so great an interest throughout the county, that committees were appointed in every township, to make collections for this Institution, which have already reached a considerable amount.

A similar invitation was received from the citizens of Wilmington, in the month of September last, and accepted; when the services of many benevolent persons were enlisted in our cause; and on their solicitation and assurance, that an application to the Legislature of the State of Delaware would meet with success, if presented by the Managers, in company with their pupils, Messrs. Fraley and Snider, with the Principal and eight of the pupils, went to Dover on the month of January last. The exhibitions made before the Legislature, were highly satisfactory to them; and they have since made an appropriation for the support of several indigent pupils from their State. Exhibitions were also made before large audiences at Wilmington and Smyrna; and much kindness, hospitality, and liberality from the citizens of Delaware, were received during this visit, which the Board have great pleasure in acknowledging.

After this visit to Delaware, Messrs. Dunn and Richards, with the Principal, exhibited the proficiency of seven pupils, to the Legislature of New Jersey; who, it is hoped, will be induced to secure by a handsome appropriation, the benefits of this Institution for the indigent Blind of that State.

In April last, the Institution was removed into Thirtieth street, where two houses, with intermediate lots, were taken on rent. In these houses, the present number of pupils are comfortably accommodated; but a few more only can be received; and space is much needed for the various manufactures. The members of the Board have therefore been very active in the endeavor to raise by contributions, the sum of 20,000 Dollars, upon which depends the grant of 10,000 Dollars from the State of Pennsylvania, for a building. When this sum is secured, a lot will be purchased, and an edifice commenced; it being of great importance to relieve the Institution from the burthen of rent, and to provide accommodations for a much larger number of pupils. For although the allowance from this State, of 160 Dollars for each indigent pupil, does not pay one-half of the expenses of 20 children, and if even the number were increased to 40, would not be nearly sufficient; yet proportionably, the expenditures would be very much reduced; and, independently of other motives to extend the charity, it is much more for our interest.

An application will be made to the Legislature of this State, for an increase of the allowance per pupil; and, should they augment it to 200 Dollars per annum, we might securely depend upon the charity of our fellow citizens, to supply what else may be wanting; and regard the permanence of the Institution as assured. At present, its income, (as will be seen in the accounts of the Treasurer, herewith submitted) is far below its outlay; and, although all the economy in the power of the Board, consistent with the comfort and advantage of the pupils, has been practised, it has been found necessary to encroach greatly on the ten thousand dollars granted by the State, which it was hoped,

might have been in part added to the permanent fund.

That our expenditures have been so great, will perhaps excite surprise in those acquainted only with the economy of other institutions of education; but, it must be recollected, that none of the ordinary apparatus of instruction, can be used by us: neither the slate nor black board, no common map or printed book; that the books, maps, and music sheets, with raised characters—the tables for calculating and writing—the musical instruments—the machines and materials for manufactures, are all costly, and the Blind, from their peculiar privation, require both more attendants and more instruction, than any other children.

To increase a permanent fund, yielding interest, and to extend the number of annual subscribers, will be incumbent upon the Board of Managers for the ensuing year; and an appeal is confidently made to the benevolent, to further this effort, which the interest already excited in this community, by our Institution, authorizes us to hope.

Already, by this charity, have upwards of twenty children been raised from a state of helplessness, gloom and degradation; a burthen to industrious parents, or with a prospect for life of dependence on public charity, they are now receiving a means of honest maintenance. Deprived of all the enjoyments of the best of our senses, new sources of pleasure have been bestowed—new channels of information opened to them. Cut off by their calamity, from the ordinary pursuits and associations of others, we have raised them to the rank of their fellow men; and taken from them the stamp of inferiority, which even pity had inflicted on their helplessness. Whether we shall be able to continue this good work, and extend it to others, will depend upon the liberality with which our appeal is answered; and we see no reason to doubt the result.

By order, and on behalf of the  
Board of Managers.

WILLIAM WHITE, President.

JACOB SNIDER, Jr. Rec. Sec'y.

PHILADELPHIA, March 2, 1835.

Since the foregoing Report was submitted to the Contributors, the Board have received a communication from Mr. Snider, on the subject of Printing for the Blind. In the course of last year, he devoted much time to the accomplishment of the printing the Gospel, according to St. Mark, for the use of the pupils of this Institution; and which has been to them a work of great utility and benefit. The whole expense for the apparatus and printing, was incurred by three members of the Board of Managers, the funds of the Institution not being adequate to engage in the work. Mr. Snider has liberally offered, (provided funds can be raised without infringing on those of the Institution) to have printed, the Gospel, according to St. John, from *copper plates*, in a form more condensed and convenient; the execution superior to any heretofore printed, and as durable as that of his former work; on the following terms:—

“For 100 copies, bound for use, and the copper plates to be delivered to the Institution, the sum of \$400.—For any number of copies over this number, at the rate of \$2 per copy:—or, he offers to have any work printed, containing as much matter as the one proposed, in 125 pages, size of 8 by 10 inches, for the same sum.”

The Managers regret, that the necessity of applying the funds to the erection of buildings, precludes their engaging at present in this important work. This statement is made in the hope, that those who are greatly interested in the further advancement of this branch of the education of the Blind, will be induced to furnish aid for the proposed undertaking. A specimen of the printing by this method is annexed; exhibiting more

matter in the same space, and greater durability than any books yet printed for the Blind.

## THE PENNSYLVANIA INSTITUTION,

*For the Instruction of the Blind,*  
In Thirteenth street, between Race and Vine streets,  
Philadelphia.

*Julius R. Friedlander, Principal.*  
*John B. Stout, Assistant Teacher.*  
*Adolph Schmitz, Professor of Music.*  
*John Roxbury, Master Workman.*  
*Ann Nicholes, Matron.*

## PUPILS.

<i>Names.</i>	<i>Where from.</i>
Abraham Marsh,	Philadelphia city.
Theodore Myers,	do
William Graham,	Moyamensing, do.
George Lafferty,	Passyunk, do.
William Hatz,	Lancaster city.
Beneiah Parvin,*	New Castle, State of Dela.
John B. Martindale,*	Charlestown, S. C.
Eli Wieland,	Lancaster city.
Jewett H. Gray,*	Harrisonburg, Rockingham county, Va.
Richard Guyn,	Southampton, Bucks county, Pa.
Joseph Ramsey,	Philadelphia county.
Philip Fetterow,	York county, Pa.
Sarah Marsh,	Philadelphia city.
Mary Ann Mallet,	Philadelphia county.
Mary E. Nuneviller,	do
Hannah Gilham,	Franklin county, Pa.
Hannah Newborough,	East Marlb <sup>o</sup> , Chester county, Pa.
Cordelia U. Snyder,*	Berks county, Pa.
Maria Lightfoot,	W. Whiteland, Chester county, Pa.
Sarah Siegfried,	Montgomeryville, Mont'g'y county, Pa.
Catherine Smiley,	Philadelphia county.

## RECEIPTS AND EXPENDITURES.

Statement of Receipts and Expenditures of “The Pennsylvania Institution for the Instruction of the Blind,” from March 1st, 1834, to March 1st, 1835.

## DR.

1834.

March 1. To Amount borrowed from Permanent Fund, being amt. of Expenditures above Receipts for 1833, as per Treasurer's account,	\$ 876 48
Invested in Penn'a 5 per cent. Stock, of Donation from State of Pennsylvania,	6,400 00
Paid for Furniture, including Bedsteads, Bedding, Oil Cloth, and Carpets,	850 80
Paid Bills for Dry Goods,	208 35
Rent of houses occupied by Institution,	789 60
for Fuel,	257 13
for hardware, tin ware, including Kitchen utensils,	94 89

\* Not paid for by the State of Pennsylvania.

March 1. To amount paid for	
Board of Principal, Assistant Teacher, Music Teacher, a Blind man teacher of handicraft, a Porter, and twenty-one pupils, to this date; including washing and mending for blind teacher and pupils,	2,087 57
Paid Salaries of Principal, Assistant Teacher, Music Teacher, blind Teacher, and Porter, including salary of the Principal from March 1st, 1833,	3,347 50
Paid for fixtures in school room and workshop, for erecting a Furnace, (returned and credited in account as a donation,)	66 12
Paid Principal, for expense of a Journey, as per account, \$100 00	
do. on general acc. 10 00	110 00
Paid for Lumber,	144 95
Paid for Carpenter's work, desks and fixtures to the school rooms and work shop, and erecting work shop in the yard,	278 24
Paid for Painting,	42 67
Paid for Books and Stationary,	19 05
Paid for Advertising and Printing,	94 35
Paid for Bricklaying in the yard,	33 33
Paid for materials used in the manufacture of articles by the pupils,	125 84
Paid for incidentals, as per vouchers,	183 03
Amount of expenditures by the Principal, as per his account and vouchers, viz:	
Paid for materials used in the various manufacture and tuition in the Basket making,	\$328 45
For apparatus for instruction, used in school room, and work shop,	92 65
Expenses of Journey with pupils thro' Penn'a, to Wilmington and Trenton, and of Principal to N. Y. and Boston,	299 52
For items of clothing, for three pupils,	16 84
For incidentals, as per account and vouchers,	172 58
	910 04
To balance in hands of Principal, to Credit of the Institution,	272 62
	1,182 66
	\$17,276 77

1834.	CR.	
March 1. By	donation received from the State of Pennsylvania, for Expenses,	\$10,000 00
	Interest received on \$2,500 of Permanent Fund, invested in 1833,	81 60
	Sale of Pennsylvania Stock of the \$6,400 invested, \$1000 Premium,	30
		1,030 00
Sept. 20.	Received from the State for pay of individual pupils,	666 66
Oct. 20.	Sale of Pennsylvania State Stock of the remaining 5,400 invested, \$1000 00 Premium,	27 50
		1,027 50
	Interest on 3,600, Permanent Fund, and 5,400, expend. do. to Aug. 1, 1834,	225 00
	Pay of Pupils, not paid for by the State,	296 50
	Contributions from 221 Annual Subscribers, at \$3 00 each,	663 00
	Receipts, by the Principal, as per account and vouchers, viz: Rec'd for sales of articles manufactured at the Inst. by the pupils,	\$527 69
	By proceeds of several Concerts & Examinations,	544 97
	Rec'd of Treasur'r for expenses of journey thro' this State, by order of the Managers,	\$100
	Do. do. on general acct.	10
		110 00
		1,182 26
	Sale this day (from the remaining \$4,400 invested) Penn. 5 per cent. Stock, to meet the exact amount due the Expenditure Fund at this date, viz:	
	Invested of Expenditure Fund,	\$4,400 00
	March 2, rem'ng at this date,	2,337 40
		2,062 60
	Premium,	41 25
		2,103 85
Errors excepted. Philada. March 2, 1835.	Respectfully submitted to the Contributors.	
	ISAAC ELLIOTT,	
	Treasurer.	\$17,276 77

TRAVELLING.—Passengers are now conveyed the whole distance between Pittsburg and Philadelphia, in a little more than four days, by a new mode of transportation, departing from this city, they take the rail road to Columbia, and thence embark in handsomely furnished canal boats, which they only leave at the mountains, crossing thence the rail road cars, and, at the western termination, resuming the canal boats, and proceeding without further interruption to Pittsburg. The meals are to be taken on the boats, and the nights spent in comfortable beds, while the boat is in progress.

## MOUNT CARBON RAIL ROAD COMPANY.

In compliance with the Act Incorporating the "Mount Carbon Rail Road Company," the following statement is furnished to the Legislature, containing "an abstract of the accounts of the Company, showing the whole amount of their Capital actually paid into the Funds of the Company, and the amount of dividend declared each year, or the loss sustained, as the case may be."

DR.											
To Capital Stock paid in,										\$38,604	
do. subscribed but not paid,										3,846	
Debts due by the Company,											42,450
Tolls,											61,620 21

## City of Philadelphia, SS.

Personally appeared before me the subscriber, one of the Aldermen of the said city, John White, President of the Mount Carbon Rail Road Company, who being duly sworn doth depose and say that the above abstract is a just and true statement of the accounts of the Company as they stand on its books.

Subscribed before me this

Signed,  
February 1835.

Signed, Jos. Burden Aldermen.

## ARRIVAL FROM PITTSBURG.

Yesterday the Canal Boat, Sarah Tiers, belonging to the Pittsburg Transportation Line, arrived at their Warehouse Chestnut street wharf, Schuylkill, freighted with a full cargo from Pittsburg; being the first arrival this season by the Canals and Rail Road.

Com. Herald.

## HOLLIDAYSBURG, Pa. April 1.

Thirty six boats arrived at our port, up to the 1st inst, and sixty-four departed.

## STEAM TOW BOAT.

It affords us pleasure to state that the Directors of the Philadelphia Steam Tow-boat Company, have contracted with Mr. John Vaughan of Kensington, for building one of the boats for this Company, intended to ply between this city and the Breakwater. The Boat will be one hundred and fifty feet in length, breadth of beam twenty-one feet, and depth of hold nine feet, to be propelled by two engines each of seventy-five horse power.

Com. Herald.



From the National Gazette.

## THE CASE OF THE FAYETTE COUNTY LAWYERS.

This case, which has created great interest, not merely among the members of the legal profession, but through the community generally, has been lately decided by the Supreme Court, after argument and careful examination. The decision is one which must give great satisfaction to the whole community. If there be a sacred right, it is that which preserves to an advocate his amplest privileges in a court of justice. History abounds with occasions, where the manly firmness of the lawyer has been demanded, and successfully displayed, in opposition to power assumed, as well within as without the precincts of the Court. It is true, this right ought to be carefully restrained within the limits not of law merely, but a just respect to a judicial officer. Beyond that point, however, it ought not to be restrained; on the contrary, it ought to be preserved and strictly guaranteed. The decision of the Supreme Court in this instance does so; and the principles on which it rests, are sound, liberal and just.

The facts in the case are few, and so far as is necessary to its elucidation, appear in the opinion delivered by the Court. It was at first proposed to make them the subject of legislative investigation; but by the agreement of all parties, they were submitted, under the authority of an act of the Legislature, to the Supreme Court, then in session in this city. The case was argued, on behalf of the legal gentlemen who had been removed from the bar, by Joseph R. Igersoll and George M. Dallas, Esquires, and on the part of Judge Baird, by John Sergeant and James Todd, Esquires.

The following opinion was delivered by the Chief Justice.

### IN THE MATTER OF AUSTIN AND OTHERS.

An attorney at law is an officer of the Court. The terms of the oaths exacted of him at his admission to the bar, prove him to be so; "you shall behave yourself in your office of attorney within the court, with all due fidelity as well to the court as the client." Again: it is declared in the Constitution—Art. 1. Sect. XVIII, that "no member of Congress or other person holding any office (except attorney at law, and in the militia) under the United States or this Commonwealth, shall be a member of either house (of the Legislature) during his continuance in Congress, or in office," which is a direct constitutional recognition. And his office is an office for life. Though recognised by the Constitution as we have seen, it is without limitation of duration by the terms of admission to it, by the provisions of the constitution, or by any statute. The grant of an office without express limitation, at common law, being taken most strongly against the grantor, endures for the life of the grantee; and though this principle has not been applied to offices within the grant of the executive, it must necessarily be applied to the office of attorney, for to subject the members of the profession to removal at the pleasure of the court, would leave them too small a share of the independence necessary to the duties they are called to perform to their clients, and to the public. As a class, they are supposed to be, and in fact have always been, the vindicators of individual rights, and the fearless asserters of the principles of civil liberty, existing where alone they can exist, in a government, not of parties or men, but of laws—on the other hand to declare them irresponsible to any power but public opinion, and their consciences would be incompatible with free government. Individuals of the class, may, and sometimes do, forfeit their professional franchise by abusing it; and a power to exact a forfeiture must be lodged somewhere. Such

a power is indispensable to protect the court, the administration of justice, and themselves. Abuses must necessarily creep in; and having a deep stake in the character of their profession, they are vitally concerned in preventing it from being sullied by the misconduct of unworthy members. No class of the community is more dependent on its reputation for honor and integrity. It is indispensable to the purposes of its creation to assign it a high and honorable standing; but to put it above the Judiciary, whose official tenure is good behaviour, and whose members are removable from office, by the Legislature, would render it intractable, and it is therefore necessary to assign it an equal share of independence. In the absence of specific provision to the contrary, the power of removal is, from its nature, correlative to the power of appointment, and it is consequently the business of the judges to deal with delinquent members of the bar, and withdraw their faculties when they are incorrigible.

But the end to be attained by removal, is not punishment, but protection; as punishment, it would be unreasonably severe, for those cases in which the end is reclamation and not destruction, and for which reprimand, suspension, fine or imprisonment seem to be more adequate instruments of correction: for expulsion from the bar, blasts all prospects of prosperity to come, and mars the fruit expected, from the training of a lifetime. For this reason, the statute to regulate attachment and summary punishment for contempts, seems to be inapplicable to this class of cases. Expulsion may be proper, where there has been no contempt at all, as in the case of brutality, drunkenness and the whole circle of infamous crimes. It is one thing to remove from office, for unfitness, and another to punish for contempt. In fact, the court may have recourse to both together, and there is no reason, therefore, why it should not be at liberty to proceed on the ground of unfitness, and waive the contempt. It is not doubted that any breach of the official oath is a valid cause, for proceeding for the former; for the man who deliberately violates the sanctions of a lawful oath, proves himself to be unworthy of further confidence; society has no other hold upon him. The most insignificant breach of the fidelity enjoined, may therefore, be visited with this measure. But it is supposed that as this fidelity is exacted by the terms of the oath, but "in the office of attorney," and "within the court," the act which may violate it, must be done in the face of the court. The oath undoubtedly looks to nothing like allegiance to the person of the judge, unless in those cases where his person is so inseparable from his office, that an insult to the one, is an indignity to the other. In matters collateral to official duty, the judge is on a level with the members of the bar as he is with his fellow citizens, his title to distinction and respect resting on no other foundation than his virtues and qualities as a man. But it is nevertheless, evident that professional fidelity may be violated by acts, which fall without the line of professional functions, and which may have been performed out of the pale of the court. Such would be the consequence of beating or insulting a judge in the street, for a judgment in court. No one would pretend that an attempt to control the deliberations of the bench by the apprehension of violence, and subject the judges to the power of those who are, or ought to be, subordinate to them, is compatible with professional duty, or the judicial independence so indispensable to the administration of justice. And an enormity of the sort, practised but on a single judge, would be an offence, as much against the court, which is bound to protect all its members, as if it had been repeated on the person of each of them, because the consequences to suitors and the public would be the same, and whatever may be thought in such a case, of the power to punish for the contempt, there can be no doubt of the existence of a power to strike the offending attorney from the roll.

It is equally obvious that an attempt to overawe the bench by menace, challenge, or the employment of an engine so powerful as the press, is an offence of the same stamp, the difference being but in the means of committing it. It may be said the judge is bound to despise considerations of danger or annoyance, and do his duty manfully without regard to consequences. The law however deals differently with human infirmity and provides for the influence of those hopes and fears which are in a greater or less degree inseparable from our nature. Moral courage, to an ordinary extent, is certainly a necessary qualification for the bench; but physical courage is no more a qualification, than animal strength or prowess in fighting. The enormity of breaking the peace by assailing its official conservators which might be sufficient evidence of professional disqualification, without recourse to the purpose to be gained by it would be wanting in the case of a libel, unless it were a very gross one, and therefore the motive should be clearly shown to have been the acquirement of an influence over the judge in the exercise of his judicial functions by the instrumentality of popular prejudice. Does the existence of professional responsibility for libel, when thus limited and guarded, infringe on the liberty of the press? The conduct of a judge, like that of every other functionary, is a legitimate subject of scrutiny, and where the public good is the aim, such scrutiny is as open to an attorney of his court as to any other citizen. It is the prostitution of it to impure purposes, that can bring him into collision with his professional fidelity—even a battery might be committed by an attorney on a judge consistently with the official relation, if provoked in matters of social intercourse. It is the motive that makes an invasion of the judge's rights a breach of professional fidelity; from which he is to be protected for the sake of the public and the suitors of his court, not for his own. To impair the general confidence in the purity and efficiency of the administration of distributive justice, is a vital injury to it; and the attorney who abuses the public credulity with a view to that effect, cannot complain if the faculties from which his capacity for mischief is mainly derived, be taken away from him.—The sum of the matter is, that an attorney at law holds his office during good behaviour, and that he is not professionally answerable for a scrutiny into the official conduct of the judge, which would not expose him to legal animadversion as a citizen. Such being the principle, it is necessary to ascertain the form and pressure of the case, to which it is to be applied. The ground of disrespect laid by the President of the Common Pleas, is the letter sent to him by the respondents.—The rule to show cause was laid without specification of cause for expulsion, except that this letter was then put on the record, and undoubtedly as containing the matter to which they were required to respond. It was only when told that the publication of the correspondence would be insisted on as a separate charge, that they put in a supplementary answer to it, and having been treated as such there, it must be treated as such here.

But nothing was said of the prefatory matter which introduced the correspondence to the public; nor was the newspaper which contains it even filed. It is doubtful therefore whether it can be treated as a part of the case. For myself I should say it cannot. The additional matter put upon the record by the respondents, consists of two letters addressed to them by the President, the first being that which elicited the offence of the respondents, and the second a reply to it. The case is then made up of these three letters, the fact of publication; and possibly the prefatory remarks which accompanied it. Now without taking into view the solicitation of an interchange of views contained in the President's first letter, the assertion that the court had lost the confidence of the public, and the suggestion of his retirement as the means of restoring it, might be

deemed an impertinence; but not affecting the course of his public duty, it could not be deemed a breach of professional fidelity. But looking to the terms of his letter, we find their expressions to be but an echo of his own. He had spoken to them of discipline relaxed and disorder introduced; of inadvertent remarks indicative of contempt for his decisions, and calculated to impress the public mind unfavorably to the court and himself its organ; and of giving place to a successor who might obtain their confidence and co-operation. His design to do so, he had spoken of as having been yielded to the advice of his friends, but not as having been relinquished, and in conclusion he had solicited their views in reference to the future. These sentiments were expressed neither in the words nor in the connection in which I have arranged them; but it is evident they were considered in this connection by the respondents in framing their reply.—“The public confidence,” they said, “seems to be withdrawn alike from the bar and the court. Perhaps your Honor's retiring from the bench, as you have intimated a willingness to do, and giving the people power to select another, would be the means of producing a better state of things, and a more cordial co-operation from all sides, in the dispatch of the business of the court. This expression of our views is made in candor and sincerity, and without a wish to inspire one unpleasant thought or unkind feeling, but under a sense of duty to the county in which we live, to your honor and to ourselves.”—Surely these expressions breathe any thing but contumely. It is alleged that a memorial presented to the court a few months before, and signed by five of the eight respondents, and the remarks prefixed to the correspondence evince a different state of feeling. To a mind exasperated by a sense of outrage, it would naturally appear so—but the impression would be effaced by reflection. The memorial being no part of the case, is to be laid out of view; but we are bound by a sense of what is due to the occasion, to express no less than painful surprise, to learn that gentlemen whose professional intercourse with us has been superior to all exception, have participated in scenes elsewhere, whose reminiscences can furnish no subjects of gratulation or sentiments of self respect. The remarks prefixed to the correspondence, were doubtless written in an angry temper; but as the contest had assumed a character of determined hostility, they are not fairly indicative of the temper that prevailed before; and whatever may have been the secret motive of the respondents, the language of their letter is bland and respectful.

The character of the act of publication depends on the motive for it. Was the object of the respondents to assail the reputation of the President, or to defend their own? I am unable to understand why it should have been supposed the former; for there is nothing in the correspondence to disparage him as an officer or a man—though laboring under evident, but excusable excitement, his language was temperate and courteous, the measure proposed alone being badly chosen. The officer who parleys with resistance proposes terms of capitulation. A better, and the only effectual cure for the disorders of his court, would have been a firm, but temperate and equitable application of authority to the refractory; and the prompt expulsion of those who braved it. Had the respondents been removed from office for actual in-subordination, their case would have been a clear, but hopeless one. But they have earnestly and uniformly protested that the object of the publication was not to affect the judge, but to disabuse the public mind; and professing this to be their motive, it seems to me that in the absence of evidence to disprove it, we are bound to receive it as the true one. They too acted from the impulse of excitement, for which allowance is to be made, believing, as they say they did, that the President had implicated them in the disgraceful assault on his person. But what seems

to be entitled to decisive influence in a legal view, is the fact that the publication was made by them not as members of the bar, but as persons put upon their defence by an intimation that they were to be dealt with criminally. In that predicament, to intrench themselves into popular prejudice, may have been wrong in them as men; but it certainly involved no dereliction of professional duty. In conclusion, it appears that a case to justify the removal of the respondents has not been made out; and it is therefore considered that the order which made the rule absolute be vacated, and the rule discharged; that the respondents be restored to the bar; and that this decree be certified to the Common Pleas of Fayette county.

Decreed accordingly.

On pages 113 to 117 of the present volume, will be found the correspondence between Judge Baird and the Attorneys, and proceedings of Court in the case decided in the preceding opinion.

From the Philadelphia Gazette.

#### IMPORTANT DECISION.

William Morgan, otherwise } Supreme Court of  
called BILL. } Pennsylvania.  
vs. } WRIT DE HOMINE REPLE  
J Reakert, Keeper of } GIANDO.  
Arch Street prison.

On Tuesday, March 31, 1835, a motion was made to quash the above writ, under the following circumstances. The plaintiff, a mulatto, named Bill, was claimed to be the slave of Mrs. Richardson, of Hartford county, State of Maryland, and being arrested, was brought before the Hon. Judge Randall, according to law, and after a thorough investigation of the claim, (the slave being there attended by three attorneys) Judge Randall was satisfied from the evidence, and on Saturday, March 28, at 12 o'clock, was about to pronounce such a decision, when a request was made that the certificate authorizing his removal to the State of Maryland, should not be granted until 5 o'clock of the same day, in order that time and opportunity might be afforded to issue the above writ; the delay was granted and the certificate was not issued till 5 P. M. On the discharge of the Judge being presented, the keeper of the prison refused to deliver the man, the writ *de homine replegiando* having, in the meanwhile, been served upon him.

The Supreme Court (all the Judges being present) immediately ordered the writ to be quashed, the certificate of the State Judge being conclusive evidence, according to law, and the writ being in derogation of the claimant's constitutional rights.

Counsel for claimant—Henry M. Phillips, Esq.

For slave—David Paul Brown, Charles Gilpin, and George Griscom, Esq's.

#### TRADE OF THE WEST.

The Commercial List of Saturday says—"We have ascertained that above Zanesville, Ohio, goods can be brought to this city, cheaper than they can be carried to New York. The cost of transportation on a barrel of Flour from Zanesville to New York is \$1 63, to Philadelphia \$1 58; from Wheeling to this city it is \$1 50. By comparing the prices at New Orleans and this city during the past year, it will be seen that after deducting all expenses, the advantage is more than fifty cents per barrel in favor of Philadelphia, as a market. A considerable quantity of Flour from Wellsville district has already been despatched by the Pennsylvania canal to this city. Large quantities of hams and bacon have also been shipped at Cincinnati for this market; and at least 6000 hhds. of tobacco will be sent here from Kentucky and Ohio during the coming season.—*Commer. Herald.*

#### CANALS AND RAIL ROADS COMPARED.

(Concluded from page 239.)

##### COST OF CANALS.

We subjoin a table marked A,\* containing the cost of 50 canals in England: this table gives the name of each canal, the total cost in pounds sterling, cost per mile, length of each canal in miles, lockage in feet, date of completion, original cost for each share, and the value and dividend of each share in 1821. In March 1828, in November, 1831, in 1833, and on the 21st of October, 1834. Forty-five of these canals, being the most important in England, have an aggregate length of 1,464 miles. We also subjoin a table of the principal rail ways, only one, however, of those which are completed and in operation, (the Liverpool and Manchester,) is calculated for general trade.

In table B.\* we give a view of the principal canals in this country; it contains all the particulars that we were able to obtain of 40 canals, principally in the northern and middle States. It has the names of the canals, the length of the main trunk and feeders, depth of water, width of surface, number of locks, their length and width, and the aggregate lockage on the canals and feeders, number of dams, date of completion, cost per mile, total cost and the tolls for each, for the years 1833 and 1834.

The information contained in the tables for the canals of this State, was obtained from public records and from documents in the Comptroller's office. That for the Pennsylvania and the other canals, were taken principally from the official reports, and from information derived from the officers having charge of these canal respectively; we have also been assisted in the inquiries by private records and memorandums in our possession.

The Erie canal extends from the Hudson river at Albany to Lake Erie; is 363 miles long and has 689 feet of lockage; the canal is 40 feet wide on the surface, 28 feet wide at the bottom and four feet deep.—The locks are 90 feet long, between the gates, 15 feet wide, and built principally of lime stone, laid in hydraulic cement, with the small stone cut and laid in courses. Although there is a small amount of elevation, compared with the distance, being but 9-10 feet of lockage per mile, there are a few places that presented formidable difficulties in the construction: a part of the distance between the Hudson and Schenectady, the rock excavation at Little Falls and the deep cutting in the mountain ridge west of Lockport.

The Champlain canal is the same dimensions as the Erie canal; the locks are constructed in the same manner, except they are 7 feet longer, and one foot less width. This canal is 64 miles long, and extends from the junction 9 miles north of Albany to Lake Champlain. The summit is supplied with water from the Fort Edward pond, and by a navigable feeder from the Hudson river, taken out above Glen's Falls.

The Glen's Falls feeder is 7 miles long, and with the pond, makes a navigation of 12 miles in length; there is a descent of 132 feet by 13 wood locks.

The Oswego canal is constructed similar to the Erie canal, but has nearly one half river navigation. The locks are of the same dimensions and quality, except one, which is built of wood.

This canal extends from the Erie canal at Syracuse to Lake Ontario.

The Cayuga and Seneca canal is, with the Cayuga branch, 23 miles long, connects the Erie canal at Montezuma with Seneca lake at Geneva, one half of which is river navigation. It has 11 wood locks that overcome an elevation of 80 feet. The dimensions of

\* The form and size of these tables, forbid their insertion in the Register, in detail. A table exhibiting a summary of them will be found on page 250.

the canal and locks are similar to those on the Erie canal.

The Crooked Lake canal is 8 miles long, connects the Crooked and Seneca lakes and has 269 feet of lockage, this, although the locks are of wood, is the most expensive of the State canals; the large expenditure is accounted for by the great elevation overcome, and by the difficulties in construction in the narrow rocky valley of the outlet.

The Chemung canal extends from the head of the Seneca lake to the Chemung river: it is 23 miles long, and the summit is supplied by a feeder of 13½ miles in length, from the Chemung river, at the Chimney Narrows in Steuben county. This canal and feeder, (as also the Crooked Lake canal,) is 42 feet wide on the surface, 26 feet wide on the bottom, and four feet deep; the locks are of wood, connected with the upper level by a wall of masonry at the head. The length of navigation, including 2½ miles of pond in the Chemung river above the feeder dam, is 39 miles, with a lockage of 516 feet, and is the cheapest of the State canals.

The Erie canal cost	\$19,255 49 per mile.
Champlain,	15,520 95 "
Oswego,	14,879 93 "
Cayuga and Seneca,	10,295 85 "
Crooked Lake,	19,597 11 "
Chemung,	8,504 96 "

The aggregate cost of the six State canals, paid by the Canal Commissioners for their construction up to the time when they were completed, for the 558 miles of navigation, is \$9,692,106 68, being an average cost of \$17,367 57 per mile.

The Delaware and Hudson canal extends from the Hudson river, near Kingston, to Honesdale on the Lackawaxen river, in the State of Pennsylvania. This canal is 108 miles long, 36 feet wide on the surface of the water, and four feet deep. The locks are 76 feet long, nine feet wide in the chamber, 110 in number and overcome an elevation of 1,073 feet: 60 of the locks are of hammered stone masonry, and 50 are composite, of stone and wood.

There was some formidable rock excavation in the valley of the Delaware and Lackawaxen rivers, which increased the expense of construction.—The average cost of this canal was \$20,665 per mile.

#### *Pennsylvania Canals.*

The Pennsylvania State canals are divided into nine divisions, and they have an aggregate length of 601½ miles. The main line of these canals form a communication in connection with the Columbia and the Portage rail roads, between Philadelphia and Pittsburg.—Between these places there are 282 miles of canals and 119 miles of rail way.

The Delaware division extends from Bristol to Easton, 59½ miles; and in the valley of the Susquehanna, including the west and north branch, there are 183 miles of canal, besides the Beaver and French creek divisions, west of the mountains. These State Canals have 1,933 feet of lockage, and their total cost is \$13,301,335 60, or an average of \$22,113 44 per mile.

Beside the State improvements there are three important canals in Pennsylvania owned by corporations, viz: The Schuylkill, the Lehigh, and the Union canals.

The Schuylkill canal extends from the city of Philadelphia up the river of that name, 108 miles, to the coal district. This work, has 62 miles of canal and 46 miles of pools, formed by 28 dams across the Schuylkill river. There are 92 lift and 28 guard locks, and the total lockage is 588 feet. This canal was completed in 1825, and the business upon it has increased so rapidly that it has been necessary, and the directors are now constructing double locks to accommodate the trade. At its completion (in 1825,) the canal cost \$16,741 26 per mile.

The Lehigh canal was constructed principally for the transportation of coal, and extends from Mauch Chunk to Easton on the Delaware river, 46½ miles.—This canal is 60 feet wide on the surface and 5 feet deep; the locks are 100 feet long (except 4, which are 130,) and 22 feet wide in the chamber; and its large dimensions has, doubtless, added much to its cost.

Coal that is brought from the Lehigh mines down this canal, may be sent to Philadelphia by the Delaware canal, or to New York through the Morris or the Delaware and Raritan canals. This canal cost \$33,610 73 per mile.

The Union canal connects the Schuylkill and Susquehanna rivers; this, although a small canal, 36 feet wide on the surface of the water, and 4 feet deep, has been expensive in construction. Connected with this canal is a feeder of 24 miles in length, to supply its summit level. This feeder is navigable, and a rail road of 4 miles in length extends to the coal mines. A large expenditure has been incurred to construct reservoirs, 3 feeders, and for the use of two steam engines, of one hundred horse power each, to supply the summit level with water, and for several miles the sides and bottom of the canal have been planked, to prevent leaks in the limestone districts. This canal cost \$18,518 51 per mile.

The three canals have 1,452 feet of lockage, and cost \$5,354,151 13, and the average cost of the 262½ miles is \$20,377 36 per mile.

The State of Ohio completed their canal, from Lake Erie to the Ohio river, in 1832, which, together with the Miami canal and feeders, make an aggregate of 400 miles of navigation. The total amount of lockage is 1,557 feet; the locks, 184 in number, are constructed of cut stone laid in hydraulic cement; and the total cost of the canals and appendages, as appears in the Canal Commissioners report of 1833, is \$4,189,539 64, or an average of \$10,473 84 per mile.

The Chesapeake and Ohio canal will form a communication from the city of Washington, 342 miles in length, to Pittsburg. That portion nearly completed and navigable extends from Tiber creek, in Washington city, 109 miles to a point 8 miles west of Williamsport. This canal varies from 5 to 7 feet in depth; and from 50 to 80 feet in width; the ascent is 353 feet, overcome by 44 lift locks 100 feet long by 15 feet wide in the clear, constructed of cut stone masonry laid in hydraulic cement.

This canal is situated in the valley of the Potomac; it is of large dimensions and formidable difficulties have been encountered in its construction. The amount expended and required to complete 109 miles is \$4,164,732 04, or an average cost of \$37,291 12 per mile.

There are five canals in New England, having an aggregate of 170½ miles in length, with 1,363 6-10 feet of lockage, constructed by private corporations at an expense of \$2,187,000, or an average of \$12,838 71 per mile. The Blackstone canal between Worcester and Providence, of 45 miles long, has 48 locks of cut granite, laid in cement; the other four canals have wood locks.

Three of the canals embraced in the tables are of large dimensions, and were constructed of suitable capacity for the navigation of coasting vessels.

These canals connect the great bays of the Atlantic, as follows, viz: The Dismal Swamp, between Albemarle sound and the Chesapeake bay; the Delaware and Chesapeake canal, across the Peninsula between those bays; and the Delaware and Raritan forms a channel for coasting vessels between Philadelphia and New York. The above, with a canal between Barnstable and Buzzard's bays, were originally designed as the four great cuts to connect and form a continu-

ous inland coasting navigation from Boston Harbor to the bays of North Carolina. One of these canals, the Delaware and Chesapeake, was attended with peculiar difficulties in its construction, but neither are considered as proper for a standard of comparison.

The following table exhibits the length, lockage, and cost of some of the principal canals:

NAMES OF CANALS.		Length.	Lockage.	Cost per mile.	Total Cost.
	Miles.	Feet.	Dolls.	Dolls.	
6 New York State canals,	538	2,016 1/2	\$17,367 57	\$9,692 1/6	68
1 " Delaware and Hudson,	108	1,073	29,665 00	2,231,820 00	
9 Pennsylvania State canals,	60 1/4	1,953	22,113 44	13,301,233 69	
3 " Schuylkill, Lehigh and Union,	26 3/4	1,492	20,377 36	5,334,151 13	
2 Ohio State canals,	400	1,587	10,473 84	4,189,539 64	
1 Chesapeake and Ohio canal,	109	553	37,291 12	4,164,739 04	
5 New England canals,	170 1/4	1,363 6-10	12,838 71	2,189,000 00	
27 Canals,	2,210	9,748	\$18,608 41	\$41,122,585 18	

Exhibiting the length lockage, and cost of some of the principal Canals.

TABLE

### Repairs of Canals.

It appears from the report of the Comptroller, Assembly Document, No. 216, of 1835, that the repairs of the State canals, including salaries of superintendents and lock tenders, have been for the last year as follows, viz:

For the Erie canal, including 14 miles of the Champlain, and the sloop lock at Troy, \$883 78 pr mile.  
 Erie and Champlain canal, 1,005 03 "  
 Oswego canal, 329 63 "  
 Cayuga and Seneca canal, 401 46 "

The repairs for the last 3 years, ending September 30, 1834, have been, annually,

For the Erie and Champlain canal, \$826 13 pr mile.  
 Oswego canal, 313 13 "  
 Cayuga and Seneca canal, 339 88 "

And for the last 6 years, from 1829 to 1834, both years inclusive, ending on the 30th September, the repairs have been annually,

For the Erie canal, \$603 76 pr mile.  
 Champlain canal, 681 01 "  
 Oswego canal, 309 19 "  
 Cayuga and Seneca canal, 301 07 "

In the Document before alluded to, there is a division of the cost of repairs upon the Erie canal, stated separately, and the amount for the last year is,

For 159 miles, from Buffalo to Montezuma, \$600 47 pr mile.

73 " from Montezuma to 7 miles west of Rome, 660 34 "

146 " from 7 miles west of Rome to Albany, including 14 miles on the Champlain and the Troy dam and lock, 1,304 04 "

The repairs of the Erie canal in 1829 averaged \$493 12 per mile.

" " 1834 " 883 78

Being an average in the cost of repairs, of 79 per cent.

The lockages at the first lock west of Schenectady—  
 In 1829 were, 12,619  
 In 1834 were, 22,911

An increase of 80 per cent.

The last results, as do also the comparisons of former years, indicate that the expense of the repairs of the Erie canal increases in nearly the same ratio as the business.

The repairs on the Delaware and Hudson Canal, for the last 4 years, ending Dec. 31, 1834, was an average of \$527 per mile; and for the year 1833, including the salary of superintendents and lock-tenders, on the Schuylkill canal, was \$710 44 per mile.

### Cost of transportation on Canals.

In this inquiry we have selected three canals that have a large amount of business and those that have their prices well established.

The Erie canal, and the Delaware and Hudson canal in this State, and the Schuylkill in Pennsylvania. We are not able to give the items that compose the cost of freighting upon canals, with the same certainty as that expense has been reported by the Liverpool and Manchester, and the Baltimore and Ohio rail road companies; but we assume the prices, paid on canals, for down freight, upon articles of the greatest tonnage.

The Schuylkill canal in 1833, had 361,054 tons of down freight, of which 250,553 was coal from the mines; and the up freight, consisting of merchandise, plaster, iron ore, &c. amounted to 84,793 tons. The price for the transportation of coal, is one cent per ton per mile, exclusive of tolls.

By the preceding table it appears that 27 of the principal canals of this country, having an aggregate length of 2,210 miles, with 9,748 feet of lockage, embracing many difficulties, and constructed in nine of the United States, in a great variety of locations, have cost \$41,122,585 18, or an average of \$18,608 41 per mile.

The Delaware and Hudson Canal Company, in 1833, sent to market from the mines, 111,777 tons of coal, and the merchandise up, amounted to 9,700 tons. In 1834, the coal sent to the Hudson river, was 45,000 tons. The established price of transportation, was \$1 12½ per ton; of 2,240 pounds of coal for 108 miles by this canal, from Honesdale to the Hudson river, equal 1.041 cts. per ton per mile.

The property arriving at tide water, by the Erie and Champlain canals, in 1834, as appear from official statements,  
Was equal to, 553,825 tons.  
Passing from tide water, 114,608 "

Making an aggregate of 668,433 "

The proportion of down freight or property going to market, is to merchandise or tonnage going from tide water, as 4 83-100 to 1, or as 5 to 1 nearly.

The cheapest prices of freight on the Erie canal, are paid for staves, timber, wood, stone, lime, plaster and salt; the highest charges are for merchandise. We put down the rates, exclusive of tolls, as charged by the different forwarding lines, although goods are frequently taken up the canal by boats unconnected with the lines, at about half those rates; this higher price is intended, besides the cost of freighting, to pay for the risk to which the forwarding merchant is liable as a common carrier.

During the season of navigation last year, there was brought down the canals, 32,670 tons of staves, and we are informed, that the average price of transportation of this article, has been \$2 per ton for the last six years, from Tonnawanta to Albany, exclusive of tolls. The distance is 332 miles by the canal, and this would give only 57-100 of a cent per ton per mile.

There was also sent down—  
181,016 tons of boards and scantling, at 74-100 of a cent per mile.

96,642 " of wood, " at 12-100 of a cent per mile.

23,894 " salt to Buffalo passing Utica, at 47-100 of a cent per mile,

70,372 " merchandise, " at 2 15-100

Making an average of the above prices, of 95-100 of a cent per mile for a ton of 2,000 pounds.

Flour is a large item of the down freight; there is about 120,000 tons sent to market annually, and this together with provisions, may be taken as a standard of comparison.

Flour has been carried from Rochester to Albany, 269 miles, by transient boats, as low as 18 or 20 cts. per barrel, exclusive of tolls; we are informed, however, that contracts for freight to a large amount, have been made by millers at Rochester, with the established lines of forwarding merchants, for the ensuing year, at 24 cents per barrel, from the first of June to the 31st of October; before and after those periods, at 30 cents per barrel for flour, exclusive of tolls.

\* For this comparison we will take an average between these two prices, which is 27 cents per barrel, and this is believed to be about the average price paid for freight on the whole tonnage of the Erie canal during the season of navigation.

At the above rates the prices of transportation on the three canals, exclusive of Tolls, would be, for a ton of 2,240 pounds, as follows, viz:

On the Erie canal 1.04 cents pr ton pr mile.

On the Delaware and Hudson 1.041 " " "

Schuykill, 1.00 " " "

or an average of a little over one cent per ton per mile, on the three canals.

For a more perfect comparison of the cost of transportation, we will reduce these canals to a level by an allowance of 20 feet of lockage on the Erie and Hudson. Till, as equal to a mile of distance, and in consequence of the less crowded navigation, of 30 feet to the mile on the Delaware and Hudson canal.

The distance on the Erie canal from Rochester to Albany, is 260 miles and the lockage 626 feet, and reduced to a level would be equal to 300 8-10 miles.

The Schuykill canal is 108 miles long, and 588 feet of lockage, and reduced to a level in the above mentioned ratio, is equal to 137 4-10 miles.

The Delaware and Hudson is 108 miles long, and has 1,075 feet of lockage, and is equal to 135 8-10 miles of level canal.

On a level canal, the prices of freight would be for the

Erie canal, 823 of a cent pr ton pr mile.  
1000

Schuykill, 785 " " "  
1000

Delaware and Hudson, 766 " " "  
1000

and the average price of the three canals would be without toll, 793 or a little less than 8-10 of a cent per ton per mile.

In Hazard's Register, Vol. 15, page 112, it is stated that the Lehigh, the Delaware, and Delaware and Raritan canals paid last year 8-10 of a cent per ton per mile, for the transportation of 105,000 tons of coal; the contractor finding every thing, except paying the tolls.

#### GENERAL REMARKS.

Having presented such facts as are within our knowledge, with the circumstances connected with them; together with such explanations of principles, as appeared to us necessary to a correct understanding of the subject in its practical character, we have not thought it would aid in the object of inquiry, to attempt any precise ratio of comparative cost of construction or repairs, between canals and rail roads: the reason for this is to be found in the obvious modification to which any ratio must be exposed, in the varied local circumstances that will be encountered in the progress of improvements of this character, and whose tendency would render any ratio of little or no practical value. We, therefore, refer to the several statements, and particularly the tabular views, for information, which we believe when applied to any known case, will afford some useful hints in regard to the relative merits of the two different modes of facilitating internal communication. We may, however, be permitted to state, what appears conclusive from the facts presented, that canals, on the average, have thus far, cost less than rail roads, both in their construction and repairs.

In regard to their relative merits as affording the means of transportation, there is less difficulty in reaching an approximate ratio. In reducing them both to a level, we attain for general purposes, a fair standard of comparison. Taking the facts we have obtained as a basis, we find the relative cost of conveyance is, as 4.375 to 1, a little over four and one-third to one, in favor of canals: this is exclusive of tolls or profits. If the cost of construction, the annual cost for repairs, and the amount of tonnage were the same on a canal as on a rail road, then the same rate of toll would produce the same rate of profit on each. Our examinations have shown, as before stated, that rail roads in the average, cost more than canals, both in their construction and repairs. But for comparison, we assume a case in which they are equal, and charge the same toll. The average tolls on the Erie canal are less than one cent per ton per mile: assuming an average toll of one cent per ton per mile, the ratio of the entire cost of transportation and toll is, as (2.5 to 1), two and a half to one, in favor of canals. In the preceding computations, the cost of transportation on rail roads is the nett cost, as reported by rail road companies, allowing no profit on this business, while the charges on the canals is at

Continued on page 253.

## C.—TABULAR VIEW OF THE RAIL ROADS

Mentioned in the preceding pages, where the authorities for the facts will be found.

NAMES OF RAIL ROAD.	Length of road.	In direction of great- est trade.		Inclined planes worked by stationary power.	Cost per mile.	Cost of repairs per mile per annum.	Cost of transporta- tion per ton per mile.		Cost per mile per pas- senger.	Completed in the year.	REMARKS.
		Ascent.	Descent.				Actual cost.	Cost reduced to a level.			
Baltimore and Ohio, at point of rocks, $67\frac{1}{2}$ Branch to Frederick, $3\frac{1}{2}$ Liverpool and Manchester, England, Baltimore and Washington,	Miles. 71 31 30	Feet. 718 130 —	Feet. 900 229 —	No. 4 1 none,	Dolls. 29,193 100,748 50,000	Dolls. 382 2,116 —	Cents. 3.96 4.70 —	Cents. 3.05 4.07 —	Cents. 1.85 1.53 —	1831 1830 —	The roads in this table are all double tracks, made or computed. Inclined planes are yet worked by horse power. Ratio of moving power, as 4 to 10, of the entire cost of transportation. Not completed—diverges from the Baltimore and Ohio, about 6 miles from Baltimore. Essentially completed. do do only embraces the inclined planes which are together, 32,840 feet in length. There are other inclina- tions, not embraced in the planes, amounting to 1,366 feet. Total ascent and descent, 2,570 feet.
Columbia and Philadelphia, Allegheny Portage,	82 36	— 802	— 1,202	2 10	40,450 47,977	— —	— —	— —	— —	— —	
Mohawk and Hudson, exclusive of branches, Saratoga and Schenectady, comput- ed for a double road, Delaware and Hudson Canal Co., Cardondale,	16 22 16	115 138 855	234 45 913	2 none, 8	38,107 17,010 14,000	— — 623	3.50 — 3.05	— — 3.05	1.70 — —	1832 1832 1829	
Newcastle and Frenchtown, Camden and Amboy, from Amboy to South Carolina,	16½ 33 130	— — —	— — —	none, none, 1	30,000 30,000 7,200	— — —	— — —	— — —	— — —	1831 1832 1833	
Excluding the Liverpool and Manchester road in the cost of construction, the average is					30,393	1,040	3.91	3.53			Computed for a double road; (see remarks on transportation.) Believed to be mostly a single track

contract prices, which are supposed to yield a profit to the carrier. The cost of transportation on canals, as previously stated, is the average on the Erie canal, the Delaware and Hudson canal, and the Schuylkill canal; on the two latter, the cost of transporting coal only is known; and the total average of the three canals is almost exactly the same as the average price for the several different articles transported on the Erie canal. The preceding calculations are confined to a velocity not much exceeding 50 or 60 miles in 24 hours. We have not instituted any investigation to show the relative economy in high and low velocities. For the conveyance of freight, we are of the opinion, canals are not well adapted to any material increase of speed beyond 3 miles per hour; and as the speed on half of the rail roads embraced in this computation, is from 10 to 15 miles per hour, we may consider this comparison as nearly similar to one of high velocity on rail roads, and low velocity on canals. And goods that can afford to pay the difference above indicated, for the saving of time, would hold the two kinds of conveyance in equilibrium. The amount that would find so great an object in the saving of time, in comparison to the total quantity requiring transportation, it is believed would be small. In relation to the conveyance of passengers, the saving of time is highly important, and the rail road becomes eminently the superior method of communication. We are therefore led to the conclusion, that in regard to the cost of construction and maintenance, and also in reference to the expense of conveyance at moderate velocities, canals are clearly the most advantageous means of communication. On the other hand, where high velocities are required, as for the conveyance of passengers, and under some circumstances of competition, for light goods of great value, in proportion to their weight, the preference would be given to a rail road.

It may be observed in favor of rail roads, that they admit of advantageous use in districts where canals, for the want of water, would be impracticable. This advantage often occurs in mining districts, and sometimes for general trade, where it is necessary to cross dividing ridges at a level too high to obtain water for their summits.

The facts and reasonings presented, we believe clearly show, that both canals and rail roads, are highly important means of internal communication; that each has its peculiar advantages, and will predominate according to the character of the route, and the trade for which it is intended to provide.

Respectfully submitted,  
JOHN. B. JERVIS,  
HOLMES HUTCHINSON,  
FREDERICK C. MILLS,  
Civil Engineers.

ALBANY, 14th March, 1835.

Comparison of rates of Transportation.

	Ton of 2,000 pounds.	
	Price per ton	Cost if carried
	per mile.	200 miles.
	cts. mills.	Dolls.
Prices of transportation during the years 1817, 1818, 1819, by teams, from Albany to Buffalo, (usual rates, \$4 25 pr. cwt.)	29.3	\$58 60
Rates of 1835, (including tolls:)		
By Erie canal—		
For merchandise,	3.95	7 90
Flour,	1.83	3 66
Staves,	0.97	1 94
Salt,	0.93	1 86

Baltimore and Ohio Rail Road—		
Down freight,	4.0	8 00
Up “	6.0	12 00
Liverpool and Manchester Rail Road—		
For merchandise,	7.5	15 00
Hudson river, 145 miles—		
Heavy goods, (from N. Y. to Albany, 10 cts. per 100 lbs.)	1.38	2 76
Light “ 20 “ “	2.76	5 52
Provisions, &c. 7 “ “	0.96	1 92
Lake Ontario—		
Merchandise, (from Oswego to Lewistown, 146 miles, 20 cts. pr. 100 lbs. all kinds,)	2.74	5 48
Lake Erie—		
Merchandise, (from Buffalo to Cleveland, 190 miles, 23 cts. pr 100 lbs.) for heavy goods,	2.42	4 84
29 cts. pr 100 lbs. for light goods,	3.00	6 00

For the Register.

EDUCATION AND CRIME.

Dear Sir,

You have considered my Letter to Bishop White, on the Relation between Education and Crime, of sufficient interest to be reprinted in your Register, and I would beg you to publish the accompanying letter from Judge Martin Welles, of Wethersfield, as a most valuable addition. When I directed the series of queries, the answers to which I have given in the Letter, above mentioned, to several of the most competent gentlemen, I also addressed Judge Welles on the subject, well acquainted as he is with the penitentiary system and operation of the penal law in general, in the State of Connecticut. Family affliction, however, prevented him from complying sooner with my request, and I now hasten to procure the greatest possible publicity for this paper, of deep interest in various respects. It requires, indeed, no comment, and I will leave it, therefore, without any further remark, to the reflection of your readers.

Most respectfully, &c. &c. &c.  
FRANCIS LIEBER.

S. HAZARD, Esq.  
Philadelphia, }  
April 15, 1835. }

LETTER OF JUDGE WELLES.

Sir—I have received the following information from Dr. A. Welch, the Physician to the Prison, which covers substantially all the ground embraced in your inquiries.

- 16 in 100, who can neither read nor write.
- 42 in 100, who cannot write.
- 32 in 100, lost their parents before their 10th year.
- 20 in 100, between 10th and 15th years.
- 75 in 100, allow themselves to have been drunkards.
- 72 in 100, have never learned a trade.
- 4 in 100, have followed regular trades.
- 24 in 100, have begun to learn trades which they did not follow.

Less than one half have received a common English education. No prisoner has ever received a classical or collegiate education.

I have not seen the statement made in the British Parliament to which you refer—"that education does not diminish crime"—nor was I aware that Connecticut had been held up in that body on the authority of



the French Commissioners, as an instance of the truth of that position. I had indeed seen the statement of the French Commissioners in their Report, that crimes had increased in Connecticut, and that although she occupied the first rank in respect to instruction and information, yet knowledge or education did not prevent the rapid increase of crime. I do not profess to give their precise language, but the substance of their remarks at page, 68—9. This inference seems to be drawn principally from the fact that convictions for State Prison offences had greatly increased in the State, particularly since 1820. I do not think this inference, "that therefore crimes had greatly increased in Connecticut," can be justly drawn from this fact.—In my opinion, this increase of convictions to the State Prison, and the increase in the number of prisoners, is to be imputed chiefly to two distinct causes. First. Alterations or modifications of the Criminal Law.—Secondly. A diminished reluctance to prosecute or convict offenders, and consequently a more thorough execution of the Law.

For many years it has been the policy of the Legislature to increase the list of offences punishable in the State Prison; which were formerly punished in a different manner.

In 1821 the Public Statutes were revised, and many new provisions were introduced into the Criminal Code. For the three years after this revision, the average number of convictions was doubled. A committee of the Legislature appointed to inspect the condition of the Old Prison, report in 1825, that "The number of convictions, for the years 1822—'23—'24, is 158, making an average of 53 per annum, and is precisely double the number convicted in the three years immediately preceding. This very great increase is probably to be attributed in part, to the new provisions introduced into the Criminal Code at the revision in 1821." In 1824, the Statute was so altered as to subject females to imprisonment in the State Prison. This class of prisoners had been previously confined in the County Goals. In 1828, theft over a certain amount, was made punishable in the State Prison—it had previously subjected the offender to whipping, &c. In 1830, the Criminal Code was again revised. Offences which were formerly punished capitally, were punished in the State Prison, as well as many other offences which were formerly punished by fine and imprisonment in the County Goals.

In the report of 1829, the Directors of the Connecticut State Prison in discussing this precise question, whether the increase of convictions or prisoners was evidence of an increase of crime, say, they have "not seen any evidence of an increase of crime." They say, "that during the year 1827, a large number were discharged on the expiration of their sentences, and that during the past year, very few sentences have expired;" "that the former Prison lost, annually, a number of men by escape or death—during the past year we have lost none by death, and there has been no escape since the establishment of the Institution." They also state that the courts were increasing the length of sentences, and the criminal law had been altered, &c. They then remark "that there is still another cause to which we may with propriety allude—we have conversed with gentlemen residing in different parts of the State, and some of whom have been much engaged in the prosecution or defence of criminals, and they have very generally expressed the opinion that since the new Institution had been organized, a strict but reformatory discipline had been established; there was obviously much less reluctance to prosecute or convict offenders than formerly.

In their report of 1830, the directors again allude to the subject, and express the opinion that the increase in the number of prisoners, furnished no evidence of a corresponding increase of crime. They say "a great change is apparent in the character or quality

of the prisoners. Formerly our prison was filled with men from other States, who had as a matter of calculation, selected a criminal course—and were professionally rogues—ingenious and shrewd men, who had been tenants of half the prisons in the country, and who are properly styled *State Prison characters*.—This class of prisoners has been greatly diminished, and in their stead are received men who have hung heavily upon the community as a burthen—the idle, the intemperate, the imbecile, and the unprofitable members of society, many of whom have been town paupers."—As an evidence of the truth of this latter suggestion, permit me to refer you to the fact that in 1824, at the Old Prison, 47 in 100 only were natives of Connecticut—while in 1829, 51½ in 100 were natives of that State—in 1830, 57½ in 100—and in 1831, 60½ in 100.

If then the opinion be correct, that the increase of convictions or of prisoners in the State Prison may be imputed to other causes, than a corresponding increase of crimes (and it seems, to me the above facts must establish its correctness,) the whole theory of the French Commissioners will fail, and their position that "in Connecticut, notwithstanding the diffusion of knowledge, crimes increase with extreme rapidity," is not sustained. But admitting for a moment, that they are right in their opinion "that crimes have increased, that Connecticut in respect to instruction and information, occupies the first rank in the whole Union," still I do not perceive the justice of the conclusion, that "education does not diminish crime," or "that knowledge has not the power of preventing it." I concur with you most fully in the sentiment expressed at page 248 of your translation, "that it is necessary to go to the prisons and inquire into the history of each convict, and then see whether knowledge or its want is the chief cause of crime," and that "we want facts to appear against statements founded on apparent facts."—Let us then look to the above statement of facts in September, 1824, as existing at the Connecticut State Prison. What inference should be drawn from the facts that more than one half the convicts are destitute of a common English education—that 42—100 cannot write, or that 16—100 can neither read or write? What shall be said of the great fact, that not one man who had received a classical or collegiate education, had ever been a tenant of the prison? What of the appalling statement that 75—100 have been drunkards—that 72—100 have never learned a trade—and that 47—100 have been deprived of parental instruction and restraint, before the age of 15. It seems to me, that these statements must force upon us the conclusion, that the tendency of knowledge and education is to prevent crime, since we find the well informed and educated are not convicts in our Prison—and that the want of education and of early parental restraint, joined with intemperance and consequent idleness and mismanagement, are the great and leading causes of crime in our land.

There is another suggestion of the French Commissioners, at page 246 of the Translation, "That in Connecticut the number of crimes against persons (as distinguished from the crimes against property,) seems to increase with the increase of civilization." I observe also that you have alluded to the same subject at page 243, intimating "that this apparent increase in Connecticut of crimes against persons is probably owing to some peculiar and special cause unconnected with the main question." I think it is owing to such a cause—and yet I am not surprised that the French Commissioners should have drawn this inference from the documents they had before them, and the unexplained facts which are there presented. Indeed I think the table of crimes and convictions contained in our Prison Reports *unexplained*, would fully justify the opinion which they have expressed, that crimes against persons had increased in Connecticut. Yet I am persuaded that such is not the fact, and that this apparent anomaly is susceptible of full explanation, and that

nothing has occurred in Connecticut which should render it an exception to the general rule "that crimes against persons decrease with the progress of civilization." To present this subject fully, would require a more ample reference to documents, and a more extensive course of remark, than my time or limits will allow. I can but glance at the subject. It has been already remarked that since the new prison was established, there was a diminished reluctance to prosecute and convict, caused probably by the belief that the discipline was reformatory, and the knowledge that the prison was a source of revenue rather than expense. It has also been stated, that the class of ingenious and shrewd men in prison had been diminished, and in their stead are received the idle, the intemperate, the weak and unprofitable members of society, many of whom had been town paupers. Now all will admit, that this latter description of the population, particularly the intemperate, is peculiarly exposed to the commission of offences against persons. With this class originate almost all those offences which are denominated assaults with intent to kill—the brawls and battles on public occasions—and the beatings and wounding, and other breaches of the peace which disturb the community. These require the exertion of mere brute force, and to such feats of violence these persons are competent, but they are unfitted for a course of ingenious and systematic villainy. An inspection of the tables of convictions in the Prison Reports will show that the crimes of forgery and passing counterfeit money (which have been called the peculiar crimes of artful men,) have been upon the decrease, notwithstanding the increased vigilance in prosecutions. In the report of 1828, which was the first under the new Prison, it appears that the number confined on these two charges, was 17½ in 100. In 1829, 11½ in 100. In 1830, 10½ in 100. In 1831, 12½ in 100. In 1832, 10½ in 100. These returns do not show the number convicted in each year for each offence, but only those remaining in prison on the several charges specified.—The returns of the same years show that the number of those confined for assaults with intent to kill, has arisen from 4 to 28. Thus in 1828, for assault with intent to kill, 4—1829, 8—1830, 10—1831, 16—1832, 23.—A full history of the latter offence, of "assaulting with intent to kill," for the last few years, would present a curiosity in criminal jurisprudence. From 1790 to 1827, a period of 37 years, during which the old prison was in existence, the whole number of convictions for this offence was but eleven (11.) During this period, in order to insure a conviction, it was necessary to prove that the assault was made with the formed and deliberate purpose of murder—with malice prepense. So that if death had ensued, the offence would have been murder. In other words the assault with intent to kill meant in judicial construction, an assault with intent to murder, as distinguished from manslaughter. After this time (1827,) convictions for an assault with intent to kill became frequent, when the testimony showed there was no intent to murder—but that such an affray or sudden excitement existed as would in case death had followed, have constituted merely the crime of manslaughter. This practice at length became so common that the directors presented the subject to the Legislature in 1829. They say, "it is believed that in many instances of a conviction of an assault with intent to kill, the proof has shown that there existed such an excitement of the passions—such sudden heat, or such an affray as would have induced a jury in case death had ensued the assault, to have found the prisoner guilty of manslaughter and not of murder. If this opinion is correct, than this singular case is presented: A man in a quarrel or under some sudden excitement, assaults and kills another, is found guilty of manslaughter, and imprisoned three years. Another person under the influence of a similar excitement makes a similar assault and wounds his antagonist, but does not kill him,

and he is imprisoned for life." In consequence of this and other representations, the Legislature in 1829, took measures for an entire revision of the Criminal Code.—A committee was appointed to make this revision, who reported to the Legislature in 1830, at which session, the present Criminal Law was passed. In the revised act these assaults were arranged as two distinct offences—the assault with intent to murder, and the assault with intent to kill, without malice prepense, both punishable in the State Prison, but for different periods. The convictions continued to increase for this latter offence, and such was the latitude of proof which was allowed that many are represented to have been convicted, when the testimony showed that the parties had merely fought with some earnestness, and had used words of heat or passion. It appeared that the convictions of that offence for the year preceding the 1st April, 1832, were 18, being more than one-fourth of all the convictions during that year, and nearly double the whole number which had been sentenced for the same nominal crime for 37 years. Many became dissatisfied with the frequency of these convictions on such testimony, and the Legislature at its session in 1832, repealed that section of the Law of 1830, which punished in the State Prison assaults of this description. Thus the Law was restored to what it practically had been in its pristine state; punishing in the State Prison assaults with intent to murder, and leaving all other assaults to be punished as they formerly had been by fine and imprisonment in the County Gaols. Immediately after the repeal of this section, the convictions for this class of offences, was reduced nearly to its former number. From June 1, 1832, the time of the repeal, to April 1, 1833, there were two convictions, showing a decrease from the former year, of (8-9) eight-ninths.

From April 1, 1833, to April 1, 1834, there was but one conviction showing a diminution of seventeen-eightieths 17-18, from the number in 1832. There is no reason to suppose that the number of assaults with intent to kill should be increased while punishable in the State Prison. It is probably true that the proportion of this class of offences remains nearly the same—but it is only when they are punished in the State Prison, that the number appears on the Prison returns, and thus comes before the public. If I have in this imperfect sketch presented this subject in an intelligible form, I think you will agree with me that this increase of convictions to the State Prison, for crimes against persons, may be accounted for without supposing the number of these crimes to have increased. I cannot think that if the French Commissioners had been fully acquainted with the effects wrought by these modifications of the criminal law, and with the change in public sentiment as to its more thorough execution, they would have drawn the conclusion, "that in Connecticut education or knowledge did not diminish crime, or that crime against persons had increased with the progress of civilization." While I have the highest opinion of the able and successful manner in which Messrs. de Beaumont and de Tocqueville discharged their mission to this country, and of the general accuracy, the patient research, and the just and philosophical views which distinguish their report; and while I cordially admire and respect the right feeling and the kind and philanthropic spirit which pervades their work, I am not surprised if in the wide field which they explored, some facts should have escaped them. There are probably some causes in operation which were not communicated to these gentlemen; that perhaps at the moment escaped the persons with whom they conversed, and which are producing results which cannot be accounted for as the necessary consequence of the causes which were communicated. I have now Sir very briefly adverted to the leading topics suggested in your letter; and hope I have succeeded in showing that the inferences drawn from our Prison convictions are probably unfounded. Could I believe that in Connecticut crimes of violence

against the person were increasing with the progress of civilization, or that knowledge or education *did not* diminish crime; I should fear that there was some deep and hidden vice, some radical but undiscovered mischief affecting all our institutions. I have believed and still believe in the truth of the opposite opinion, that it is to the diffusion of knowledge, to thorough education, to the early establishment of right principles and habits, that society must look for its chief protection against crime; and that it was the duty of all who were entrusted with the management of our penitentiaries to devote their efforts rather to the purposes of instruction, than the objects of gain. Convicts are perhaps, generally ignorant and uneducated men. Some early neglect or abandonment has in its consequences reached to every portion of their subsequent lives, and by exposing them to a criminal course, has blighted their prospects, and affected all their destiny. If there be in the penitentiary system, one object more valuable than the rest; and which should be pursued with more energy than all others, it is in my judgment, the supplying to these unhappy men, that instruction which their early life denied. I know that these sentiments are not altogether co-incident with those which generally prevail. There is abroad a morbid feeling on the subject of prison expenditures and income, and I fear that many of the most valuable objects of the system may be sacrificed to this inferior consideration of producing a revenue from our Prisons. That Prisons should support themselves all will agree, but public opinion seems to require a large profit from the labor of convicts, and is disposed to accept of the pecuniary prosperity of an institution as evidence of its other excellencies. This state of the public mind may lead to many abuses, it may lead to the oppression of the convicts, it certainly exposes them to many privations and sufferings, and tends of course to a disregard of the means and necessity of instruction. It induces the officers to sink to the lowest point the expenses of supporting the prisons, while it urges them to every expedient to enhance the profits. It is thus our prisons are converted into great manufacturing establishments and are brought into ingenuous competition with our mechanics. You are aware that the injurious effects of State Prison competition upon mechanical pursuits, is exciting much attention both here and in New York. But my limits forbid my entering upon this subject. I shall be happy to hear from you upon any of the topics upon which you have addressed me and shall take pleasure in communicating to you any facts or information which I may possess.

I am, Dear Sir,

With much respect and esteem,

Your friend and servant,

DR. LIEBER

MARTIN WELLES.

#### GIRARD COLLEGE.

The following report was submitted to last meeting of Councils.

Mr. Gilder, submitted a report enclosing the annexed communications from the Trustees of Girard College, and Mr. Walter, the Architect.

In compliance with the ordinance of Councils, the Joint Committee, consisting of an equal number of the members of the Select and Common Councils, and of the trustees of the Girard College for Orphans have the honor to

#### Report to Councils:

A plan for the four out-buildings; the erection of which is ordered by the Will of Mr. Girard. The accompanying drawings prepared by the architect will show distinctly the position—the style of architecture—and the internal arrangements of these buildings—

and will supercede the necessity of any detailed explanations in regard to them.

The general results which the committee aimed to accomplish, were

1st. To prepare a substantial residence for the pupils, embracing every thing necessary for their health, and comfort, well lighted, well aired, with ample and thoroughly ventilated bed-rooms and eating rooms, cool in summer, and capable of being safely and uniformly heated in winter, and with a distribution of the apartments adapted to the arrangements which will probably be made hereafter for the division and instruction of the pupils.

2. To conform the dimensions of the buildings to the immediate wants of the College, with a power to increase their size or to augment their numbers as may be required by the gradual enlargement of the Institution.

The will of Mr. Girard prescribes that "there shall be erected a permanent College with suitable out-buildings, sufficiently spacious for the residence and accommodation of at least three hundred scholars, and the requisite teachers and other persons necessary in such an Institution." And again he directs that there should be "at least four out-buildings detached from the main edifice and from each other, and in such positions as shall at once answer the purposes of the Institution, and be consistent with the symmetry of the whole establishment." The committee are of opinion that it is most judicious to begin with preparations for about three hundred pupils as suggested by Mr. Girard, and their plan therefore contemplates *three out-buildings*, each containing accommodations for at least one hundred pupils, and a *fourth building*, for the residence of the Officers of the Institution. These three buildings will each be ample for at least one hundred pupils, a number which will probably afford the means of more minute attention and care to each individual pupil, better ventilation, a more exact discipline, and readier means of classifying them according to their age and their progress in study, than could be attained were much larger masses of pupils placed under the same roof. As the institution expands, these buildings can be proportionably multiplied. Four larger buildings, the number directed by Mr. Girard, would not be needed at the commencement of the institution, they would be much more expensive, and their size would require more time for their completion, and thus postpone the opening of the College which the committee are anxious to hasten as far as practicable. For this purpose moreover it would be expedient to begin with the two eastern out-buildings.

3d. The position of the buildings was adopted in conformity with the direction of Mr. Girard's will, that "they should be consistent with the symmetry of the whole establishment." The plan proposes to place two of them on each side of the College—to make them front the south—to be in the same general range with the College, but receding somewhat from the front line, the first being at the distance of 140 feet from the College, with an interval between the two buildings of 87 feet.

The effect of this arrangement will be to present one uniform and symmetrical appearance as the establishment is approached from every quarter, to have the buildings near enough to the College to afford to the pupils an easy access to it—yet not so near as to mask the College itself, while on each side is left ample room for increasing their number, or, if future experience should recommend it, enlarging the size of the buildings. The same considerations of symmetry as well as durability recommended by Mr. Girard, indicate, in the opinion of the committee, that the buildings should have the same general appearance as the College itself, and for that purpose that they should be faced with marble or granite.

These various advantages, the comfortable and

healthful accommodation of the pupils, the adaptation of the buildings to the instruction and discipline for which they are designed, a position accessible from the College, yet not interfering with the view of it, their general uniformity of appearance, so as to make with the College one harmonious whole, and finally the ability upon the same general plan to enlarge the buildings with the future growth of the institution; all these the committee have endeavored to combine, and after much reflection and personal examination of the localities, they have unanimously united in the plan which they now very respectfully submit to the consideration of the Councils.

N. BIDDLE, Chairman.

To the Building Committee of Girard College for Orphans.

Gentlemen:

I have the honor to lay before you a perspective view of "Girard College for Orphans," embracing the "out-buildings," together with a plan of the whole establishment, as adopted by the "joint committee," on the 2d inst.

I have represented in perspective the south front, as it will appear from the east side of Schuylkill Third street. The finish of the north front will be similar to that of the south.

This design embraces the College (as previously adopted by Councils,) and "four out-buildings," each of which is 52 feet wide, by 125 feet long, and three stories high.

The two buildings nearest the College were designed for the residence of the youngest scholars.—Each of these buildings contains a *basement story*, in which the dining room, kitchen, &c. is placed, a *principal story*, containing sitting rooms for students; receiving room, parlours for tutors, &c. and *two upper stories*, are divided into lodging rooms for students, tutors domestics, &c.

The upper stories are approached by means of stone stairways at each end of the halls, these halls are 8 feet wide, and extend the whole length of the building, on every floor or story.

The westernmost building being intended for the residence of the older students, is divided into small dormitories—the refectory and kitchen are in the basement, the three upper stories contain accommodations for tutors and domestics, together with a sufficient number of dormitories for one hundred scholars.

The basement stories of the three buildings intended for the residence of the students, are to be arched and the stairways are to be constructed of stone.

The easternmost building is divided into separate dwelling houses for Professors.

These four out buildings together, will be "sufficiently spacious for the residence and accommodation of at least three hundred scholars and the requisite teachers, and other persons necessary in such an institution."

I have estimated the expense of executing the *four out-buildings* according to the design, and find that the whole will cost \$225,000, understanding that they are to be faced with marble. Two of these buildings may be enclosed in this year, and finished in 1836, the remaining two may be finished in 1837.

In answer to your resolution requesting me "to state the greatest amount of work that may be accomplished during the present season," permit me to say, that I would consider it injudicious to recommend the constructing of more than one story of the large arches in the college in one season. The extraordinary dimensions of these arches, renders it necessary to use every precaution, not only in their execution, but protecting them, after they have been formed.

The arches for the support of the floor of the second story will be constructed early in the present season, and it would be impossible to progress so rapidly with

the building, as to succeed in turning the arches for the third story floor before the month of October, or November; were we to pursue this course, and construct the arches in the fall, the frosts of winter would expand the materials, and destroy the strength of the work. There is required about 25 feet in height on the whole building, together with one story of arching, before we will be prepared for turning the arches for the third story floor, in addition to this height, the walls may be carried up 5 feet above the springing line of the arches, previous to constructing them, making 30 feet in height, this may be accomplished without difficulty, during the present season, and will cost, including the work to be done on the porticoes, \$180,000.

The expense of enclosing two of the out-buildings will be about \$80,000, making an aggregate of \$260,000.

This amount of work may be executed during the present year without difficulty, and with perfect safety to the edifice.

I have the honor to be,

Gentlemen,

Your ob't serv't,

THO. W. WALTER,

Architect.

Girard College, April, 1835.

## THE REGISTER.

PHILADELPHIA, APRIL 18, 1835.

On the night of the 15th instant, ice was made of the thickness of a Dollar, and on the morning of the 16th, snow fell to the depth of one inch.

CATTLE.—Two very fine Cattle were brought from Lancaster county, in a rail road car, on Saturday the 11th inst. They were raised in Manor township, in that county, by Mr. B. Herr, who furnished us with the following as their live weights.

The largest about 5 years old,	2,005 lbs.
" smallest " 7 "	1,725 "

In this instance, we have another proof of the advantages to the interior to be derived from our rail roads. Had these cattle been driven to the city, the time required would probably have been 6 or 8 days, besides the expense of a person or two to drive them—and then they would have suffered in the flesh so much as to have required some time after their arrival here to recruit, before they could be fit for the slaughter. Now they appear perfectly fresh—not in the least exhausted—and arrived in one day from whence they started. The enterprising farmer accompanied them. We did not ascertain what the comparative expense of this mode would be—but presume it does not exceed what would have been paid had they been driven. This we understand is the first instance of this kind which has occurred.

Printed every Saturday morning by WILLIAM F. GEDDES, No. 9 Library street.

The publication office of the Register has been removed from Franklin Place, to No. 61, in the Arcade, Western Avenue, up stairs.

B. A. Mitchell.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.--NO. 17.

PHILADELPHIA, APRIL 25, 1835.

No. 381.

## EASTERN PENITENTIARY.

Report of the Joint Committee of the Legislature of Pennsylvania, relative to the Eastern Penitentiary, at Philadelphia.—By Mr. ANDERSON, of Delaware.—Read in the House of Representatives, March 26, 1835.

The joint committee to which so much of the Governor's Message as relates to abuses in the economy and management of the Eastern Penitentiary, was referred, and who were charged with an inquiry into the expediency of repealing the laws which prohibit grand juries from visiting the State Penitentiaries, and of enacting a law to authorize grand juries to visit the Penitentiaries at such periods as may be necessary for the good order and management of said prisons, and the least interference with the system of solitary confinement;

## REPORT.

It will be remembered that the Governor in his annual message communicated to the General Assembly, "information received from a high official source, of abuses, charged by individuals, as existing in the economy and management of the institution denominated the Eastern State Penitentiary." The charges alleged were comprehended in the message under the following summary: "Frequent misapplication of the public property and public labour to the private advantages of various persons connected with the institution; cruel and unusual punishments inflicted on refractory convicts; and the indulgence in great irregularities and gross immoralities on the part of those concerned in the management and general superintendence of the institution." "An institution, which besides its importance to all mankind," as is eloquently remarked by a distinguished writer, "has for Americans the additional interest of having originated with them." "That community," remarks the same writer, "which first conceived the idea of abandoning the principle of mere physical force, even in respect to prisons, and treating their inmates as redeemable beings, who are subject to the same principles of action with the rest of mankind, though impelled by vitiated appetites and perverted desires; and that community, which alter a variety of unsuccessful trials, would nevertheless not give up the principle, but persevered in this novel experiment, until success has crowned its perseverance, must occupy an elevated place in the scale of political or social civilization."—To Pennsylvania belongs this high encomium. She originated this system, and she has persevered, until success has crowned her perseverance. Any thing affecting the economy and management of this institution, thus identified with our national honor and reputation, commanding at it does the admiration of the whole civilized world, and concerning the cause of humanity, and the moral improvement of mankind, must be viewed with great interest, and demanded, as it has received, the most anxious inquiry, and the severest investigation.

Your committee impressed with the importance of the subject, both as regards the institution itself, and the reputation of those implicated in the charges which had been presented, under circumstances so imposing,

determined to make the fullest investigation. They soon ascertained that it could not be conducted at Harrisburg, as advantageously as it could at the place where the institution was located, nor without incurring a very heavy expense, which might be avoided by conducting it at Philadelphia.

They therefore determined to meet for this purpose in that city, on the 16th of December then next, and that notice should be given to the Attorney General, Inspectors and Wardens of the Penitentiary, of this determination. The committee had ascertained by a communication with the Governor, that "the high official source from which information of abuses charged by individuals" was received, was the Attorney General of the Commonwealth. They were apprised that these abuses charged, would implicate "the reputation" of individuals, and they knew therefore that the investigation would assume a judicial character, as it regarded these individuals.

A sense of obvious propriety at once suggested that the persons implicated should have full notice, and distinct specifications. The committee therefore, before they left Harrisburg, adopted a resolution, "that the Attorney General should be informed that the committee was organized and ready to proceed to business, and that previous to entering upon an investigation, he will himself, or name a prosecutor, to prefer the charges against the inspectors, warden and others, of the Eastern Penitentiary; but that the charges be specifically drawn up and preferred, copies whereof shall be furnished to the accused, and the inquiry confined to those charges."

Your committee repaired to the city of Philadelphia, and met pursuant to adjournment, in that city on the 16th of December last, and immediately entered upon the discharge of their official duty. It became manifest in the very outset of the business, that while justice to individuals required that they should be fully informed of the grounds upon which their conduct was questioned, that a due consideration of the importance of the investigation, as affecting a great state interest, equally required that on the part of the commonwealth, it should be so conducted, that a full and searching inquiry should be made. While therefore, the committee did not hesitate to direct specifications of charges to be furnished, and to allow the persons implicated, the advantages of counsel; they perceived that to conduct the investigation properly, on the part of the State, it was essential that some one should appear for the commonwealth. They ascertained that the charges made, grew out of a previous investigation before the board of inspectors, where evidence was taken, which it was supposed sustained them, and justified the necessity for a public inquiry. No individual seemed to be disposed to assume the responsibility of appearing as accuser, or to conduct the proceeding in that character before the committee. It was considered therefore, that the interest of the commonwealth required, and public opinion demanded, that the Attorney General should conduct the investigation on the part of the State. The witnesses who were examined to these charges, were for the most part unknown to the committee, and they were equally ignorant of the points to which their testimony should be directed to

elicit the truth; this would require some previous acquaintance with the nature of the evidence which could be given, and the character of the individuals by whom such evidence was to be given.

The impropriety of placing the committee, who were in some sort judges, to pass upon the conduct of individuals, in the attitude of accusers, and require that they should direct the investigation with a seeming view to their crimination, occurred to the committee. They felt that it was important in these circumstances that the Attorney General should be retained. He was acquainted with the witnesses, and had been made acquainted with the nature of the charges, and the evidence in reference to them.

The committee were aware that no power was vested in them to employ counsel, and they passed a resolution to this effect; but they were satisfied, that as the exigency of the case required that counsel should be employed, that the proper compensation for the service of counsel should be submitted to the Legislature, in the confidence that a suitable provision would be made.

They frankly communicated their resolutions on this point to the Attorney General, who, with a degree of promptness which does him credit, at once agreed to permit the matter to rest on this ground, and entered upon the very laborious duty of conducting the investigation.

Complying with the resolution of the committee, which was communicated to him, he prepared the following specification of charges, a copy of which was furnished to each of the individuals implicated:—

#### CHARGES

Against the Warden, Officers and Agents of the Eastern Penitentiary, for investigation by the joint committee of the Senate and House of Representatives of the Commonwealth of Pennsylvania, on so much of the Governor's message as relates to abuses in the economy and management of that institution; drawn up and preferred by the Attorney General, conformably to the resolution of the committee, dated the 8th of December, 1834.

First. Practices and manners among the officers, agents and females, licentious and immoral; attested by indecent conversation, gross personal familiarities, sexual intercourse, and the existence of a filthy disease; generally known to and participated in by the warden, one John Holloway, one Richard Blunden and his wife, and others unknown.

Second. Embezzlement and misapplication of the public provisions and public property, and of the public labor, to the private and unauthorized use and advantage of various persons connected with the institution, and of others unconnected with it; on the part particularly of the said wife of Richard Blunden, and to the knowledge and with the connivance of the warden; as also to the use and advantage of the warden, for the improving and working of a farm and factory belonging in whole or in part to the said warden.

Third. Cruel and unusual punishments inflicted by order of the warden upon refractory convicts; exemplified in the two following cases: the case of one Seneca Plumly, who, in the depth of winter, was tied up against the wall attached to his cell, by the wrists, while buckets of extremely cold water were thrown upon him from a height, which partly froze on his head and person, and he was shortly after discharged as incurably insane; and the case of Matthias Macumsey, in whose mouth an iron bar or gag was so forcibly fastened, that his blood collected and suffused upon his brain, and he suddenly died under the treatment.

Fourth. Known practices and habits inconsistent with the object and principles of a penitentiary and its system, subversive of its order, regularity and security; such as the giving of large entertainments within the prison, by the warden, carousing and dancing late at

night at the apartments of the said wife of Richard Blunden, within the walls, frequent intoxication, habitual intercourse with lewd and depraved persons, and irregular hours also on the part of the said wife of Richard Blunden, and with the knowledge and connivance of the warden.

Fifth. A frequent and illegal practice in the treatment of convicts by the warden, of departing from, and in effect disregarding the sentences of the courts of justice: relaxing their severity, commuting their infictions, or evading their real meaning: thus substituting his individual caprice or discretion for the decisions of the law, and defeating the regularity and precision which ought to characterize the penitentiary system.

Samuel R. Wood, the warden, Richard Blunden, and John Holloway, appeared before the committee with counsel. And although it was in the outset stated by the Attorney General, that there was no design to prefer charges against the board of inspectors, or any of them, yet, as the investigation concerned an important institution in some degree committed to their trust, and as the investigation might involve their management of it, it was considered right that they should be permitted to appear and participate in it. A resolution was accordingly adopted, giving to the board of inspectors this right.

Having adjusted these preliminary points, the committee commenced the examination of witnesses and testimony. They continued in session in the city of Philadelphia, from the 16th day of December, the day on which they met there, until the 22d of January following, when they adjourned to meet in Harrisburg. During this period, sixty-five witnesses were examined, and their testimony reduced to writing; and after their return to Harrisburg, another witness, who had been prevented by indisposition, from giving evidence before the committee in the city, appeared and was examined, and his testimony reduced to writing also.

Your committee now present the result of the laborious and important investigation with which they have been charged, and such suggestions as have occurred to them to grow out of it.

Under the first charge of "practices and manners among the officers, agents and females, licentious and immoral," much evidence was given. It appears that the warden, Samuel R. Wood, who, by law, is authorized to employ the under keepers, had engaged Richard Blunden, as an under keeper. Richard Blunden was a married man, and had resided with his wife at Norristown, in Montgomery county. He there became acquainted with Mr. Wood, and was employed by him in his private business. The warden had great confidence in him, and when he consented to accept the office which he now holds, he determined to employ Richard Blunden. The evidence concurred in establishing the propriety of this selection, and proved that Mr. Blunden was a most excellent officer, having the confidence, in a remarkable degree, not only of the very respectable gentlemen who, from no other than philanthropic and humane motives, have been induced to serve in the very onerous office of inspector, but of all the officers of the institution, and the affection and respect of every convict committed to his charge, towards whom his department seems to have been characterized at once by kindness and decision.

When this officer came with his wife to the penitentiary, unfortunately provision was made for the residence of his family, as it was for the residence of the families of other of the keepers, within the walls. This arrangement, it appears, was opposed from the first, by Mr. Wood, who wished to exclude all families from the penitentiary, he being, very properly, of opinion that it would be much better that the families of the keepers should reside elsewhere. The very respectable board of inspectors, it seemed, differed with him in opinion; at all events, as a present arrangement, and while the

building of cells was in progress. They seemed to have been governed by a view to economy and convenience. Apartments under this arrangement within the front building were assigned to Mr. Blunden and his family, and he was permitted to board some of the under keepers, and persons who were engaged, either in that capacity, or in the work then going on in the penitentiary.

These apartments were as much the distinct residence of Mr. and Mrs. Blunden, being secured to them by contract with the board of inspectors, as would have been a residence elsewhere. After the family of Mr. Blunden was thus established within the walls of the penitentiary, she, it seems, was employed at a stipulated sum, to be paid to her husband, to superintend and conduct a certain part of the cookery for the prisoners.—Intimations and complaints against improper conduct on her part were, after she had been some time in this situation, made to one of the inspectors. This induced an investigation before the board of inspectors, which covered, for the most part, the same charges which were made before the committee. This investigation proved the great propriety of the objection made by the warden to the residence of the families of keepers and others within the walls, and in June following this investigation, the residence of Mrs. Blunden was removed from the penitentiary, she having been dismissed from all occupation in the institution from the time of that investigation.

As she had ceased to be employed there, her conduct no matter how improper, had ceased to be a matter of any concern to the public, except so far as it might be connected by proof, with the conduct of those who were still engaged in the economy and management of the Eastern Penitentiary. In this point of view, a full and free inquiry into her conduct, while she resided in the institution, was permitted by your committee, and your committee regret to say that, so far as regards this woman, the evidence did go to prove very gross and improper deportment and practices, entirely unbecoming her sex and condition. The committee might, from the evidence, infer her guilt of the charge now under consideration, but as that point is no way material to any conclusion to which your committee could properly direct your attention, but in so far as it might be proved that the present officers of the institution had participated in it, the committee refrain from the consideration of this unpleasant point, and pass to the only important inquiry was this conduct "known and participated in by the warden, one John Holloway, and one Richard Blunden?"

Before the committee proceed to examine this question, as it affects the warden, it is altogether proper to state that your committee received evidence of the general good character of that gentleman. It is a well established principle affecting all investigations which, in their tendency, may be calculated to criminate any individual, that such evidence shall be received, and that when the person accused can make out a general good character, it is strong and persuasive evidence, and in all cases of doubt, or mere suspicion should lead to a full and honorable acquittal.

On this point the warden occupied pre-eminent ground. For many years a member of the Philadelphia society for alleviating the miseries of public prisons—a society which originated in 1776, and to which belongs the distinguished honor of leading the way in the amelioration of our penal code, and in establishing a penitentiary system on the principle of separate or solitary confinement; a member, also, for many years, of the board of inspectors of what is now called the Walnut Street Prison; his mind seems to have been devoted with much earnestness to the cause of humanity, and the improvement for this purpose of what is now appropriately called the Pennsylvania Penitentiary system. Without any other compensation or reward than "the luxury of doing good," this gentleman devoted his time

and means to this interesting, but to many, revolting subject. Not satisfied with the knowledge acquired in his own country, like the celebrated Howard, he visited the prisons of foreign countries, and there added to his already great experience.

Such untiring singleness of purpose in the pursuit of knowledge for the alleviation of human misery, and the improvement of the moral condition of mankind, without any selfish motive to acuate it, is certainly indicative of a sound head and a pure heart.

After the return of Mr. Wood, from Europe, his great reputation in this respect was well known, and when, in 1829, the Eastern Penitentiary was about to be opened to receive convicts, the inspectors with great earnestness, pressed upon Mr. Wood the acceptance of the situation of warden which he now holds. After some hesitation and reluctance on his part, he yielded to the importunity of the friends of humanity, who were anxious to place under his direction an institution which would carry into full effect the great system so long urged by philanthropists, and to which Mr. Wood himself had been so much devoted. Messrs. De Beaumont and De Toqueville, commissioners appointed by the King of the French, to visit the penitentiaries of the United States, and who did visit those of the different states, speak in these strong terms of our warden.

"Among the superintendents of the American penitentiaries we have especially to mention Mr. Samuel R. Wood, director of the new Philadelphia prison—a man of superior mind, who, influenced by religious sentiments, has abandoned his former career, in order to devote himself entirely to the success of an establishment so useful to his community."

Another gentleman, Dr. Francis Lieber, already known as a distinguished scholar and philanthropist, and for great knowledge of penal law, and the penitentiary system, as connected with it, and who has given to our language one among the best books that have been written on this subject; in speaking of Mr. Wood, says, "I have visited many of the penitentiaries on this continent. I have not of course become acquainted with the wardens of other penitentiaries as well as I have with Mr. Wood, because I have resided here; but I never found a superintendent of any penitentiary of a more humane disposition, and clearer mind on all subjects of the penitentiary system, than Mr. Wood; I must add here, that I have received from no one more sound practical knowledge of the penitentiary system generally, than from Mr. Wood. I have for my part, never become acquainted with a person whom I thought equally fitted for that station."

To this may be added the evidence of persons of the first respectability, who concurred in their testimony; to the high moral character of Mr. Wood, and with whom they had been intimate for years. And this evidence was not attempted to be contradicted by any one.

The committee would have yielded with great reluctance to testimony which went to compel the conviction of one who had hitherto been remarkable for his moral excellence, and his humane concern for the good even of the most abandoned. It would have been painful to have been driven to any such conclusion. But the committee were determined to permit no consideration of this sort to interfere with the severest inquiry. They therefore allowed a latitude almost without a limit, and they feel pleasure in declaring that it has not resulted in establishing against the warden any thing to tarnish the high character we have already referred to. We consider it unfortunate that Mrs. Blunden, of whom we have already spoken, was ever permitted to reside within the walls of the penitentiary; and perhaps to this circumstance most of the mischiefs complained of may be traced, but in considering whether a person of high character has been guilty with her, care should be

\* When examined as a witness.

taken to separate any infamy which may have been proved to be attached to her, from the consideration of the evidence of any such participation. No evidence was given to show practices and manners licentious and immoral on the part of Mr. Wood, nor of any such on the part of Mrs. Blunden, or any other person in his presence, and with his knowledge, and although a jealous mind might infer guilt from the smile of benevolence, with which the warden is wont to regard all persons, or from the fact that the employment of this woman in the house frequently brought them together, in the same, more especially as she attended to his wardrobe, yet no rule of propriety or reason would justify any such conclusion.

As to Richard Blunden, there was no evidence which went to implicate him on this point, or to show that he had in any degree encouraged or promoted any improper conduct of his wife.

Of John Holloway, the clerk of the institution, evidence was given of improper language having been used in his presence, but not by him. It may be too that indiscretion may have betrayed this gentleman into a greater degree of familiarity with this woman than a delicate sense of propriety would justify; but the evidence as to this did not establish enough to countervail the evidence of general good character, which this gentleman adduced, or to make it proper under the circumstances for further notice from the committee.

Having thus disposed of the first charge, we proceed to the second: "Embezzlement and misapplication of public provisions, and public property, and of the public labor, &c."

The evidence on this charge related principally to two points, the first, the embezzlement and misapplication of the public provisions and property by Mr. Blunden, with the knowledge and connivance of the warden; second, the use of the public labor, or the labor of convicts, or those employed by the State, for the use of the warden, without proper compensation having been made to the State.

On the first point the evidence did show that there was reason to believe that this woman had been in the practice of embezzling provisions, groceries, &c. and of applying them to her private use, but there was not the shadow of evidence which went to affect Mr. Wood, with any knowledge of such conduct, much less to prove any participation in it. Notwithstanding the relation which subsists between Richard Blunden, and his wife, leading to the conclusion that he might have known any impropriety on her part in this respect; yet, it is equally true that the evidence went to negative any such knowledge, and to evince that he was always careful to protect the public property against any improper use.

In regard to the second point under this charge, which presented an investigation of the alleged use of public labor for the private interest of the warden, without a proper compensation for it, evidence was given to show that the warden had become interested as the co-partner of other gentlemen in a farm, and in a manufactory for sawing marble &c. That certain iron, and wood work was done for these concerns in the Penitentiary. As to the former it was alleged that the prices at which it was charged, were below the prices at which such work could have been procured elsewhere. On this point there was contradictory evidence, and it did appear that the prices whether right or not were fixed, not by Mr. Wood, but by another person. It was supposed that the carpenter work done for Mr. Wood, was done by workmen who were paid by the state, and of materials which belonged to the state, but it was shown by satisfactory evidence, that both these suppositions were unfounded and that Mr. Wood could not be properly charged with any thing wrong in this business.

But although the committee are satisfied that on this point no criminality is imputable to the warden yet they have been induced by the evidence to consider of the propriety of prohibiting, in future, the warden and under keepers from being concerned in any other business or employment than the duties of their respective offices. There is an obvious propriety in avoiding the mingling of private accounts and business with that which belongs to the public. Independent of this, the time required for other pursuits, or the care which they might induce, tends at all events to divide attention which should be exclusively directed to a trust of so much importance and delicacy. Setting aside the consideration of the temptations which arise from mingling private business with that of a public trust, to make the latter subservive the former, it at all events gives occasion to suspicion, and reproach, calculated to impair public confidence. The committee therefore have thought proper to recommend a prohibition on this subject which is embraced in the bill herewith reported. With like views, but without intending to convey censure upon any one, the committee have judged that it will be proper to prohibit any work being done to order in the penitentiary for any of the inspectors or officers of the institution. After any work is done there can be no objection to purchases being made by them as by other individuals. The committee have therefore included in the bill reported a prohibition of such work to order.

The next charge is one of great magnitude, had produced much excitement in the public mind, and the investigation of it occupied much time. This charge was of cruel and unusual punishments, inflicted by order of the warden, upon refractory convicts, &c. This general charge was accompanied, it will be perceived, by the specification of two cases: 1. The case of Seneca Plumly, who, it was said, had been "tied up against a wall in the depth of winter, while buckets of extreme cold water were thrown upon him, which partly froze on his head and person, and he was shortly after discharged as incurably insane." 2. The case of Matthias Macumsey, in "whose mouth an iron bar or gag was so forcibly fastened, that his blood collected and suffused upon his brain," and he suddenly died under this treatment.

It is assumed in this charge that the prisoners or convicts upon whom these punishments were alleged to have been inflicted, were refractory convicts; and this assumption was fully made out by the evidence. It must be remembered, that although our penitentiary system has for one of its objects the reformation of the convict, that its unfortunate inmates are men of idle habits, vicious propensities, and depraved passions. — Requiring as it does that these habits should be changed, these propensities checked, and passions subdued, before the work of reformation can be commenced, it is plain that the first step is to produce obedience. — This with many convicts, if not all, is a matter of much difficulty, requiring great firmness and discretion. — Gentle means, although not without effect, are seldom sufficient of themselves to produce this object; and yet it must be produced, or nothing can be done. Hence it becomes necessary to adopt some punishment beyond that which is inflicted under the sentence of the convict, and which is essential to secure his quiet subjection to that sentence. To allow him a refractory disregard of the proper order of the institution, would be not only of great prejudice to himself, but would seriously affect those in whom a more proper frame of mind had been produced.

Our system requires not only labor, but solitude, which combined are calculated to bring about reflection upon past misdeeds, and their evil consequences. It will not do to allow the convict to interrupt that solitude by obstreperous noise, or to refuse to perform his work, or in any respect withhold the most implicit obedience to the order of the institution.



In all the penitentiaries in the United States, such punishments are resorted to. In many, the lash is used as the chief disciplinary means of exacting this essential obedience. This is the case at Auburn and Sing-Sing, the great institutions of our sister state of New York. We have, however, for reasons not necessary here to be insisted on, but, as we think, sufficiently apparent, always rejected this punishment: but diminished food, the dark cell, deprivation of work, the use of the strait jacket, and the gag, have been resorted to with us, rather from the necessity of the case, than upon any well-defined legal rule. General power is conferred upon the inspectors "to make such rules for the internal government of said prison, as may not be inconsistent with the principles of solitary confinement;" "if they, on conference, find it necessary;" but they have not exercised this power. In most penitentiaries, rules for this purpose do not seem to have been adopted.—The difficulty of forming such rules must occur to every one, and hence, no doubt, it is, that for the most part, a large and liberal discretion is vested in the warden or superintendent; which, after all, must be the case under any system of rules which could be devised.

It was well known when the present warden of our Eastern Penitentiary was appointed, that he united to great experience, a well established character for humanity, firmness and discretion, and it was believed by the board of inspectors, that he would require no other guide in the discharge of his important and responsible duties: for this reason no such rules were drawn. The warden was left to his own discretion, and to regulate that, he of course would naturally refer to the practice of other institutions of a similar nature. In considering this charge and specifications it is material that this should be kept in view.

The specification in the case of Plumly, represents him as having been discharged shortly after he was ducked, "incurably insane," leaving as an inference that his insanity was occasioned by the use of the cold bath. It was well ascertained that he was insane at the time he was committed, and that no change in this respect, took place while he was in the Penitentiary. Was this punishment of this unfortunate prisoner cruel and unusual? It was certainly proved that many buckets of water had been poured upon him on a very cold day, and your committee cannot avoid the conclusion, that, under the circumstances, it was indiscreet; but the transaction was deprived of all evidence of cruelty, which always implies intention, by the evidence which was given. It was clearly proved that the use of the cold shower bath is frequently employed for insane patients, not only as curative, but disciplinary means, in the best institutions for this unfortunate class of men in the city and vicinity of Philadelphia.—One instance of a similar application of cold water was remarkable; it occurred in the insane hospital belonging to the society of Friends, so distinguished for their enlightened humanity.

Thirteen buckets of cold water were in that case poured out on one patient, in cold weather. It was intended to cure him of filthy habits, and it effected it. This was an object in the case of Plumly; and no doubt the knowledge which the warden had on the subject, induced him to resort to the same means. This punishment could not then, with any propriety be called unusual, and the very fact, well known, that it was in familiar use in such cases, goes far to demonstrate that its use was without cruelty, and only to be condemned on account of the indiscretion of using it at a time when the weather was so cold. No evidence was however given, to prove that any ill consequence to the convict followed. Whether this punishment had been directed to be inflicted by the warden on that day or not, was the subject of contradictory evidence.

2. It was in proof that an iron gag had been placed on the convict Maccumsey, whose conduct on that,

and on many former occasions, had been very outrageous. In a short time after it was put on, it was discovered that he was becoming insensible, and it was taken off; but every effort to revive him proved ineffectual, and he died.

This unfortunate circumstance naturally excited much feeling, in which every one seems to have participated, and induced some to suppose that the death of the convict was occasioned by the use of the gag. This impression seemed to have gained ground, and it was upon this that the grave specification under consideration was made.

It was in full proof that the use of the gag as a means of punishment, was not unusual. It appears that it has been employed in the navy of the United States; that it had been used in the Walnut street prison, and it had also been frequently resorted to in the Eastern penitentiary, in the case of other prisoners, and in the case of Maccumsey himself, without any injurious effect having been produced. It was not therefore an "unusual punishment," and it may be inferred from this, that it had not been considered a cruel punishment. In support of this position, it was also proved that the highly respectable gentleman who holds the office of physician in the institution, who is alike distinguished for his humanity, intelligence, and science, had so far considered that it was not improper, that he had suggested at some period before the death of Maccumsey, an improvement in the mode of attaching the instrument upon a refractory convict.

This evidence certainly goes far, if it does not entirely relieve the punishment in this case from all intentional cruelty on the part of those who had inflicted it.

It was still important in the investigation of this charge to ascertain whether the death of Maccumsey, had in fact been occasioned by the use of the gag. To show that it was not, evidence was introduced of the post mortem examination of the body of the convict. A dissection of his head disclosed very clearly that he died of a disease of the brain. The indications which were presented in this dissection, proved that this disease was a chronic disease, or one of long standing which terminated at the time the gag was put on him, in apoplexy, and occasioned his death.

This conclusion too was fortified by the many symptoms of insanity which were frequently discovered in his previous violent and unreasonable conduct.

Evidence was also given by very many surgeons and physicians, professors in our medical colleges and others; whose reputation is well known not only throughout our own country, but abroad, to prove that the gag as applied was not naturally calculated to produce death. The anatomical construction of the head and neck of the human body is such that it could have produced neither strangulation, or a stoppage of the circulation of the blood. The conclusion in which these gentlemen concurred, and with which your committee were satisfied, was, that although the application of the gag was a coincident circumstance; it was not "connected with the unfortunate event as cause and effect." It is true that when a tendency to disease of the brain exists, any excitement may precipitate the diseases to a fatal result. Extraordinary emotions of joy or anger, or the like, have not unfrequently produced death in such cases. And it may be a subject of speculation, whether the use of the gag in the case under consideration may not have been an exciting cause of the disease, which had been in progress, and which was brought to full maturity while the gag was on.—But such speculations must of necessity leave the question still in doubt, nor would the solution of it in any degree tend to any proper conclusion as to the conduct of the individuals concerned in the transaction. It may be also remarked, that if it should be admitted that the

use of the gag had been the exciting cause of the consummation of the pre-existing disease, it could not be taken as any evidence of guilt on the part of those who applied it, for the same thing might have been produced by exciting the anger, or any other violent emotion or struggle on the part of the convict, by any other instrument or means which would have restrained any part of his person, or produced such emotion or struggle.

The committee have much satisfaction therefore in dismissing the consideration of this grave charge with a full acquittal of the persons implicated from all criminal intention on their part in reference to it. The committee however are of opinion that there was great propriety on the part of the warden in discontinuing the use of this instrument; which he did from the time of the death of Maccumsey. They consider it too severe, and that it should be avoided for the future; although it may be that this opinion is derived from the unfortunate event that attended its use in the case of Maccumsey.

The evidence given did not satisfy the committee that there was any thing improper in the use of the straight jacket. It does not seem in any case to have produced injurious effects or to be calculated to produce any, while it has often served a good purpose in bringing to tranquillity and subjection, the refractory and violent.

The committee are aware of the difficulty of establishing rules for the regulation of prison discipline, and that under any rules which may be formed there must still be a large amount of discretion vested in the warden; they are, however, of opinion that as far as it is practicable they should be laid down. They might embrace some general classification of offences against prison discipline, and some designation of the punishment to be inflicted. By the act of 23 of April, 1829, as we have said, the board of inspectors "have power if they on conference find it necessary, to make such rules as may not be inconsistent with the principles of solitary confinement."

By this act it is left to their discretion, but they have in fact never exercised it. The committee are of opinion that it should be imperative upon the board to frame such rules, they have, therefore, included in the bill which they report a provision for this purpose.

The committee have already mentioned that an investigation, occupying nearly the same grounds as that conducted by them, was had before the board of inspectors. It appeared that in that investigation several of the under keepers or overseers were witnesses, and that after it was closed the warden with the approbation of the board determined that some of them should be discharged.

It appeared that differences had arisen among the officers of the institution, a want of mutual confidence existed, and there were other causes such as the expression of infidel opinions, a knowledge of abuses and a neglect of communicating that knowledge, which affected some of them, and which induced this measure. The want of mutual confidence alone would be enough to make such a course indispensable. The occasion does not require any expression of opinion in reference to the conduct of those who were dismissed, but the fact itself suggested to your committee the possible danger of abuse of the absolute right given the warden by the act of 1829, "to dismiss whenever he thinks proper" the under keepers or overseers. The committee think that it would be more appropriate to allow the warden to nominate those officers to the board, by whom they should be appointed, and that they should be removable from office by the board of inspectors alone; and they have made this a part of the bill which they propose. It is right to add that the warden very properly submitted to the board the propriety of dismissing the overseers on the present occasion.

The committee were strongly persuaded of the very onerous duties which the inspectors of this institution were required to perform, without other compensation than that which they derive from a commendable spirit of humanity. Five is the number of these inspectors as the board is now constituted. This number was no doubt sufficient when the institution was first established, but from the increase of convicts, who on the 31st of December last, numbered two hundred and eighteen, the committee are of opinion that the duties of the inspectors cannot be performed by the present number, without a greater sacrifice of time on their part, than it would be reasonable to expect from them. The committee too are persuaded that their duties are of great importance, and they feel desirous that the board should be so organized as to secure, as far as practicable, the exact performance of them. With this view the committee propose that the number of inspectors should be enlarged to nine, three of whom should be appointed annually by the Supreme Court, so that each inspector shall serve three years, and they have reported a section for this purpose in the bill which accompanies this report.

The duties of the physician of the penitentiary are very arduous, and are constantly increasing as the penitentiary fills up with convicts. Humanity requires that this officer should always be, as he now is a man of learning and skill. The committee think that to secure the continued service of such a man as Dr. Bache, the salary, \$500 per annum, is not adequate, and that it should be increased. If a fair and liberal compensation be not given, for a proper person to fill this department, it cannot be expected that such a one can be procured to render the services required from the physician by the act of Assembly, and which the increase of the convicts in the institution must necessarily augment.

The committee also present for consideration, a section in the bill which provides for the appointment, by the physician, of two assistants, who are not to receive any compensation. The advantages of improvement which the practice in the penitentiary would allow to young physicians, would no doubt induce gentlemen of this liberal profession, who are ever ready to embrace such opportunities, to accept these as they do similar appointments in other like public institutions in the city.

We have before adverted to one of the great and humane objects of our institution. Other countries consign the unfortunate offender against their penal laws to death, or hopeless infamy, from which no returning footsteps are to be traced: we, on the contrary, while we punish to deter from the commission of crime, never abandon the hope of reclaiming the wretched offender against the law. We place him in the *locus penitentiae*, and we seek to present to him motives to return to the paths of virtue. While he is made to feel the vengeance of the law, he is taught to know its mercy, and to learn to sin no more. A judicious religious instructor is very important in this work of reformation. Christian instruction, bringing to the deluded sons of vice, in the solitude of their cells, the wisdom of the purest morals and the consolations of religion, must always prove a powerful auxiliary (if indeed it can be at all accomplished without it,) in bringing the convict back to a proper regard for the obligations which rest upon him, in all the relations of life.

It is obvious that reformation of convicts independent of the considerations of humanity, is of great consequence in a political point of view, as it tends to preserve society from the dangerous contamination of a hardened offender, who returns to its bosom but to infect it, and from the heavy expenditure which crimes in every way directly and indirectly occasion. Impressed with the importance of this subject, your committee conceive that it will be altogether right to employ \*

religious instructor, and give him such compensation as may be necessary to insure the services of such.

The gratuitous exertions of clergymen, who now at intervals, when their duties permit, devote a portion of their time to the inmates of the prison, is worthy of all praise. But beyond the valuable, but precarious services of excellent men, who are only permitted by other duties occasionally to engage in this work of humanity, much is required to be done by a regular and steady system of instruction wisely conducted.

We have therefore presented this subject to the consideration of the Legislature, by a section which authorizes the board of inspectors to employ a religious instructor.

The committee find that in New York, a chaplain is appointed for the penitentiary, and in the late report of their commissioners, to the Legislature, it is recommended that "the duties of the chaplain should be extended and defined by law, an office provided for him in the prison, and that he should be required to devote his entire time to its concerns."

The fourth charge in its general terms covers all the ground of the first, but the specifications connected with it opened other points of inquiry than those suggested by the first.

They principally referred to entertainments given within the penitentiary. The occasional entertainments or dinners given by Mr. Wood, in his apartments, which are distinct from the cells occupied by the convicts, on public occasions, when the institution was visited by committees of the Legislature or public visitors, were sanctioned by the board of inspectors, and he could not therefore be considered as censurable on that head; nor do the committee conceive that there is impropriety in the exercise of the rites of hospitality by the warden, when this is done without in any degree affecting the good order of the institution. The penitentiary is for the punishment of convicts, and those who occupy apartments within its ample walls, who are there as officers of the institution, cannot properly be denied social intercourse with their friends, if such intercourse is conducted with propriety.

On one occasion, Mrs. Blunden it seems, in her apartments, had what is commonly called a quilting frolic, at which dancing was permitted. As this woman was long since removed from the institution, and the desire of the warden that families should not be permitted to reside within the walls, had been long since yielded to by the board of inspectors, the inquiry into her conduct on this occasion, or the propriety of the entertainment was not a subject of much importance. While the committee therefore do not hesitate to condemn the one, and the other they are not called upon to do more than express this opinion, and their entire concurrence in the propriety of the warden's views as to the residence of families within the walls, which, if adhered to will avoid the recurrence of that which they do not hesitate to disapprove.

The presence of some convicts on such occasions they consider improper, but this will more appropriately fall under the consideration of the next charge preferred.

"Fifth charge, a frequent and illegal practice in the treatment of convicts by the warden, of departing from and in effect, disregarding the sentences of the courts of justice, &c."

It does appear that convicts had been frequently employed in cooking, in working, in breaking coal, in making fires, occasionally as waiters, and in work connected with the building and construction of cells, out of their cells. And some convicts are now employed, as blacksmiths, which requires that they should be constantly while at work associated, each with an individual not a convict, who aids in the work. For some time before the investigation commenced by your com-

mittee, all convicts had been returned to their cells, and they ceased to be employed as described, except only such as are engaged as blacksmiths in the manner stated, one of whom owing to his great skill as a workman, is still engaged in work connected with the building of new cells, which as your committee understood sometimes required that he should be employed out of his cell.

All this was with the knowledge of the board of inspectors, and as far as the committee could ascertain, with their entire approbation.

Care seems to have been taken in this employment of convicts out of their cells, to keep them entirely separate from each other. This was certainly strictly enjoined by the warden, and if it was in any case departed from, it was the result of accident, not design, or grew out of the nature and manner of the employment of the convicts.

Economy seems to have been the chief motive for this departure from the spirit and letter of the law; and besides this, as the system, in the extent to which it was proposed to be carried in the new penitentiary, was considered by many an experiment, and there were not wanting many who entertained the belief, that separate and solitary confinement in cells, even with labor, would produce fatal consequences upon the minds and bodies of the convicts, it appears to have been considered by the board proper to commit to the enlightened discretion of the warden, well known for his zeal in advocating the system, and his extensive experience on the subject, the privilege of such relaxation as would insure the system the fairest chance for success. In permitting this liberal exercise of discretion by the warden, the board confided it to one for whose enlightened experience they had entire respect—one whose laudable ambition it was to identify his reputation with the great triumph in the cause of humanity which the full success of the system would realize. Some of the convicts employed in the way described, were apparently in delicate health, and others, by good conduct, had acquired a large share of the confidence of the officers of the institution.

But however the committee may be disposed to respect the motives for this departure from the law now under consideration, they do not consider it at all justifiable.

It is well remarked by the distinguished commissioners of France, Messrs. De Beaumont and De Toqueville, that "application to labor and good conduct in prison, do not procure the prisoner any alleviation. Experience shows, that the criminal who, whilst in society, has committed the most expert and audacious crimes, is often the least refractory in prison. He is more docile than the others, because he is more intelligent; and he knows how to submit to necessity, when he finds himself without power to revolt. Generally, he is more skilful and more active, particularly if an enjoyment, at no great distance, awaits him as the reward of his efforts; so that, if we accord to the prisoners privileges resulting from their conduct in the prison, we run the risk of alleviating the rigor of imprisonment to that criminal who most deserves them, and of depriving of all favors those who merit them most." The committee are not without some inclination to believe, from the evidence, that the truth of these observations is well illustrated by the cases of indulgence which occurred in the Eastern Penitentiary.

Some effort was made to sustain the propriety of the course pursued in these cases, by a construction of the act of the 23d of April, 1829, which it was intimated warranted it. It is true, that the language of that act is "shall be sentenced by the proper court to suffer punishment by separate or solitary confinement at labor," a careful consideration of the whole scope of that act, a careful attention to the language used here, and the very plan upon which the penitentiary is con-

structed, independent of all other circumstances, will lead to the conclusion, that the punishment for which it provides was not only separate as it regards the convicts themselves, but solitary confinement at hard labor; precluding the idea of permitting intercourse beyond the absolute necessity of the case, with other persons who are not convicts. It is true that the disjunctive conjunction is used, but it is not used to make a distinction between two kinds of punishments in the alternative, either of which might be used at discretion, but the words "separate or solitary," are employed as descriptive of the nature of the only punishment which by the act, is established. That is, the punishment is to be not only separate but also solitary.

It is the profound and noiseless solitude of the penitentiary cell, from which alone we can hope for that deep reflection and penitential sorrow, leading to a moral change in the mind and disposition almost wholly cancerous and depraved, with lawless passions, licentious habits, and obdurate propensities. Such a mind must be thrown back upon itself, and left without that delusive prop which wicked men derive from intercourse with their fellow men, more particularly, if that intercourse should be with those who want the extreme prudence and discretion, to say nothing of moral qualifications, which can in any case make such intercourse profitable to the unfortunate convict.

The very intelligent and learned gentleman already spoken of, Dr. Lieber, who has so well repaid his adopted country, by the excellent works he has written on some of her best institutions, said on this point—"I conceive the characteristic principle of the Pennsylvania penitentiary system to be solitary confinement, with labor: it is not possible, compatibly with my idea of the system, to have labor without solitary confinement, unless by way of exception, which would prove the rule. I should consider that letting prisoners out of their cells daily, to work in the kitchen, or to labor in the yard among laborers, or together, would be an infringement on what I consider the system to be."

If we refer to the history of this system, which has immortalized the jurisprudence of Pennsylvania, placing her far above every other community in the scale of humanity and wisdom, at all events as regards her penal laws, we shall find that not only separation, but solitude, was in the very outset considered the chief means of effecting the great object, the reformation of the criminal.

The prison society, "to the unostentatious and indefatigable labors of which we are indebted" for the change which was accomplished in the management of jails in Pennsylvania, "in 1783, when the supreme executive council called on the society, by resolution, for information concerning the state of the prison, and solicited advice on the course necessary to be pursued, and the most salutary measure to be adopted," made report, which "closed with this memorable sentence:—"On the whole, as a matter of the utmost moment to the well-being, safety, and peace of society, as well as of the greatest importance to the criminals, the committee think it their duty to declare, that from a long and steady attention to the real practical state, as well as the theory of prisons, they are unanimously of opinion, that SOLITARY CONFINEMENT, and hard labor, and a total abstinence from spiritual liquors, will prove the most effectual means of reforming these unhappy creatures."

In 1791 and 1794, the Legislature made the initial steps towards the introduction of this system. It is well known, however, that it was but very partially carried into effect—the building erected not permitting this to be accomplished: the great expense of constructing a suitable building for this purpose, no doubt operating to deter from the entire execution of the plan. But although these difficulties existed, cases did occur "in which the prisoner immediately on admission was conducted to his cell, and remained in it

until his discharge from prison. The cases thus treated were the only instances of reformation which continued throughout the lives of the individuals, as far as could be traced and ascertained by the anxious and inquiring friends of the system."

The principle so long ago advanced as an essential part of the reformed penal code of Pennsylvania, has been constantly kept in view, and again and again, urged by the friends and advocates of the system, until at length the Legislature of our State, in the years 1818, 1821, determined to make the noble effort, which resulted in the erection of the Eastern and Western Penitentiaries, at Philadelphia and Pittsburg, where this fundamental principle of the system could be fully tested. The history of this question is given in the very able letters of that eminent philanthropist, Roberts Vaux, to the celebrated William Rensselaer, to which reference may be made with profit by those who feel an interest in this subject.

When, then, it is well understood that entire seclusion was thus considered an essential part of our system, and the eastern and western penitentiaries were constructed for the very reason that those already in existence were not adapted to the purpose, it is altogether plain that it was the intention of the Legislature, by the act of 1829, to enjoin separate and solitary confinement of the convicts. The committee therefore consider the employment of convicts, in the manner stated, as inconsistent with the law, and the characteristic principle of our penitentiary system.

It is however but fair to say, that while the building of cells was in progress, such departures from the law cannot be considered in the same light as if this excuse did not exist. It seems too from evidence given to your committee, that similar departures have been permitted in the Western penitentiary, under similar circumstances. The committee do not mean to condemn the employment of a convict of great skill in certain work, which is required in cell building, and which requires him to be out of his cell under proper restrictions; that may be considered as justified by peculiar circumstances: nor do they mean to be understood as expressing any disapprobation of such indulgences as are directed by the physician, these are sanctioned by the act of assembly, nor is there any thing objectionable in such intercourse with the convicts as may be necessary for their instruction in the occupations in which they are employed, this of course is unavoidable, but should be carefully guarded, and the committee heard no complaint from any quarter on this point—But there is a subject connected with this branch of the case, which requires to be well considered. We allude to the employment of convicts in handicrafts which require constant association while at work with another individual not a convict, as for instance blacksmith work, at which several convicts are now so employed. The committee cannot avoid the conclusion that however profitable, in a pecuniary point of view, it may be, it is nevertheless at variance with the fundamental and essential principle of seclusion upon which the excellence of the whole system depends. Perhaps it may be expedient, owing to the great saving which such employment of the convicts produces to permit it to continue until their work is no longer needed in the building of new cells, but when this takes place, it should be altogether abandoned. It is proper here to say, that all the forebodings of those who have opposed our system on account of its essential principle at which we have glanced, have been fully proved to be unfounded. Neither have individuals "been put to death by the superinduction of diseases inseparable from such mode of treatment," nor has the mind of any been caused by it, "to rush back upon itself and drive reason from her seat." No such fearful consequences have been produced, and although no doubt this punishment is calculated, and very properly, to inspire well grounded terror in the minds of evil doers, it does

not seriously affect the bodily health or sanity of the convict.

The committee have thus considered in their order, the charges preferred; they have now to proceed to some other points which became incidentally subjects of attention.

Some evidence was given to show that some of the under keepers had been paid as laborers out of the cell building fund, instead of being paid as officers of the institution, out of the penitentiary fund. The committee are not warranted from the evidence in the conclusion, that there was any intentional impropriety in this, inasmuch as the payment itself was proper, and both funds were provided by the Commonwealth; but care should be taken for the future, to permit no consideration of convenience to interfere with a proper, and exact separation, and adjustment of all accounts of the expenditures of the institution.

Another topic became incidentally the subject of consideration before your committee. It seems to have occasioned some slight excitement in the immediate neighborhood of the institution, it is known to have created much more in another state, and it seems to be worthy of a passing remark.

We allude to a supposed injurious effect which the labors of the convicts in the mechanic arts, has upon the labors of the citizen mechanic. The supposition has been, that the product of the convict labor works this injury by competition with the product of the labor of the mechanic. If this supposition was well founded, if in point of fact, this highly respectable, and all important class of the community were indeed injured by the mechanical labor of the convicts in our penitentiaries, it should certainly be a subject of anxious inquiry by the Legislature how this might be avoided.—But your committee were satisfied, that the supposition is without serious foundation. This may be readily perceived to be correct, by a simple comparison between the number of convicts engaged in mechanic arts, and the number of citizens in the same pursuits. The prices at which articles manufactured in our penitentiaries are sold, are not variant from those at which similar articles made elsewhere, are disposed of. Care should of course be taken that this should always be the case, as it would be extremely improper to reduce those prices so low that an injurious competition in this respect should take place. In New York, where the excitement on this subject had reached a dangerous height, commissioners were authorized to inquire into it, who made an able report on the subject to the Legislature of that state, at its present session. They attribute any evil which may have been produced by the mechanical labor of convicts in their penitentiaries, principally to the law which authorized the hiring of the labor of the convicts to individuals, which they condemn. Under this law, contracts were made for this labor for prices so low, that in some branches the individuals who contracted for it, have been enabled to undersell those who are engaged in the same branches of mechanical business, and who were without this advantage. This practice not being allowed with us, of course this source of complaint does not exist here.—But even in New York, it is strongly demonstrated, that any injury which has been done has been greatly exaggerated.

But if it should be admitted that the small amount of convict labor which is employed in our penitentiaries should produce some slight effect by competition, an appeal might well be made to the justice and humanity of a body of men who, in this country, have been remarkable for their enlightened patriotism and philanthropy. In the first place, it must be considered, that without labor, the unfortunate convict would be driven, in solitary confinement, to madness or death; but if he escaped a termination of his career, in a manner more cruel than capital punishment, he would be returned to society, perhaps infuriated to revenge by the punish-

ment he had undergone, enfeebled by indolence, so corrupting in itself, and not only without the inclination, but without the ability to gain an honest livelihood, even were he so disposed. He would then almost certainly resume his vicious pursuits, and commit fresh depredations upon society, and increase the amount of crime, in itself much more expensive to the community and injurious, in this respect, than all the evil that could be produced by convict labor, no matter how injudiciously employed.

Another reflection must also present itself to every considerate man. An immense expense is brought upon the community by the construction of our Penitentiaries and the maintenance of them; this has been charged upon all classes, the farmers, the mechanics, and all others. Justice requires that the convict should by his labor make some compensation for his depredations upon society, and their consequences, and justice also requires that his labor should, at all events contribute to support him, and relieve the community of a portion of the great expense to which it is put to maintain and punish him.

Your committee cannot advise the repeal of the 2d section of the act of the fifteenth August, 1834, which repeals the 3d section of the act of 1829, authorizing grand juries of the cities of Philadelphia and Pittsburg, to have access to the prisoners, in the Eastern and Western Penitentiaries. We have already shown that solitude is essential in our system of punishment. To suffer the prisoners to be visited by many individuals, some of whom might be injudicious persons, would be in a great degree to disturb this necessary solitude. Under the act of 1829, the grand juries of the courts of the city and county of Philadelphia, were permitted to visit the convicts. The court of Oyer and Terminer holds one, the court of Quarter Sessions four, and the Mayors Court four sessions in each year, in the city of Philadelphia: the grand juries of these courts may therefore, in one year, number two hundred and seven persons, who under this act were permitted to visit each prisoner, and this besides the official visitors authorized by this act.

It must strike every one that the visit of so many persons must prove injurious. Your committee have however thought that it would not be without advantage, to permit a portion of such grand juries to visit the convicts; they therefore report a section in the bill which they propose to provide for the appointment, by the court of Oyer and Terminer, of the city and county of Philadelphia, and the county of Allegheny, at each term, of five persons out of the grand jury, whose duty it shall be to visit the Eastern and Western penitentiaries, and make report to the court. They also propose to make the District Attorneys, of the United States, for the Eastern and Western districts, official visitors, inasmuch as convicts under the laws of the United States are permitted to be imprisoned in these Penitentiaries.

There is a subject of much interest connected with our Pennsylvania system, which, although not precisely within the inquiries with which your committee were charged, yet is of so much importance that they cannot refuse to consider it: this is the exercise of the pardoning power, by the constitution, vested in the Chief Executive Magistrate. Our system of criminal jurisprudence is exceedingly mild when compared with that of other countries, your committee think that it is wisely so: there can be no question that a system of mild punishments, which are always certain to be enforced, are the most effective: it is the certainty of punishment, which stands instead of great severity, to deter offenders from the commission of crime; it however, punishments are not only mild, but uncertain; or in other words, if these mild punishments are liable to be frequently set aside by the exercise of the pardoning power, their effect in preventing crime must be greatly diminished; but this exercise of pardoning power, has an injurious effect

upon the convict himself; your committee found, among the convicts whom they visited, many whose minds seemed to be occupied with the hope of pardon. The committee cannot better express their views on this subject, than by introducing from the valuable preface of Dr. Lieber to the work of Messrs. De Beaumont and De Toqueville, an extract from the report of Mr. Dumont, to the representative council of Geneva, which expresses in strong and convincing terms the proper views on this subject.

"It may be laid down as an incontestible principle that in matters of penal justice, I was going to say, in penal pharmacy, every thing which diminishes the certainty of punishment is evil; every punishment which is not fixed, which floats between fear and hope, is a punishment badly contrived. The causes of uncertainty between the law and its operation, are already but too numerous; if this is an inevitable evil, it ought to be reduced to its narrowest limits; but what shall we think of a law, the object of which is to render the punishment uncertain! and this is nevertheless the result of a tribunal of pardon, open to the petitions of the prisoner during the whole term of his imprisonment. We should know man very imperfectly were we not aware of the readiness with which he takes his wishes for hopes, and his hopes for probabilities. I agree that a convict wishing for pardon, will take care not to create himself difficulties by acts of insubordination or violence; I allow that he will pay attention to his words and behaviour: but it is a fact, that this idea, always present to his mind, causing a disturbed feeling of anxiety and expectation, will absorb and prevent him from being resigned to his situation, and following his labour with reflection and calmness. He feels like an indigent person, who having taken a lottery ticket, has his imagination absorbed by dreams of success, and fears of misfortune. It has been observed that prisoners, after having been unsuccessful in their petitions for pardon, become more calm and resigned to their situation and duties as soon as their fate was fixed. I owe this interesting observation to our jailor. Thus for the double end of increasing the certainty of punishment, and of making it more subservient to moral correction, this indefinite recourse to pardon ought to be abolished, and a fixed character be given to it."

The moral improvement of the prisoner must depend upon a calm resignation on his part; until that is obtained there will be no hope of a salutary reflection on his past life, and no fixed resolution to become a better member of society. While his mind is constantly agitated by alternate hopes, and fears, hopes of pardon, and fears that he may not obtain it, he cannot become tranquil.

But how to restrain this pernicious evil, or how to regulate the exercise of the pardoning power so as to restrain it, is a question of more difficulty. Every executive must feel, and know, how hard it is to exercise this power properly. He must feel that he is exposed to importunities the most urgent, and persuasions addressing themselves to the feelings of compassion very difficult to resist.

Besides he is liable to be imposed on by false representations of persons who seek pardons without any regard to the propriety of conferring them.

The constitutional power conferred upon the Governor "to remit fines and forfeitures, and grant reprieves and pardons," cannot be restricted, but it is within the competency of the Legislature to provide the means of giving such notice of an application for a pardon as will give to those who are acquainted with the case, an opportunity of canvassing the propriety of granting it. With this view we have introduced into the bill herewith reported, a section which provides that in case an application is made to the Governor for the pardon of a convict, he may cause an advertisement of such application to be inserted in a newspaper printed in the proper county, once a week for six weeks to-

gether, to give notice to those who may choose to object to the pardon, and that such advertisement shall be paid for out of the county funds.

Every Executive would feel himself bound in any case where he supposed that it might be proper to grant a pardon, to have such notice given, and if it were given, an opportunity would be afforded to make him fully acquainted with the facts of the case. If upon the application itself he was satisfied that no pardon should be granted, he would not of course make such advertisement. The committee think that such a provision will have a most salutary effect, and will most probably control the abuse of the pardoning power, which has so often occurred under every administration of our state government.

The committee cannot close this report without an expression of their entire satisfaction with the very faithful and able manner in which the investigation was conducted on the part of the Commonwealth, by the Attorney General.

Although it occurred at a time when several courts in which the Attorney General had business, were in session, and it was continued with but little interruption for more than five weeks, during which the committee sat, generally speaking, the entire day; this gentleman at a great sacrifice of time, and no doubt of business, attended the laborious sittings of the committee, and conducted the investigation.

It will of course be proper to make him a suitable compensation for his services.

The committee accompany this report with some interesting and sound views on some of the points considered, communicated by Dr. Lieber, to which reference may be had with advantage.\*

In conclusion, the committee cannot refrain from expressing their high admiration for the institution, the economy and management which has been the subject of their examination, nor can they avoid the cordial belief, that it is calculated in an eminent degree, and beyond every other institution of the kind, to attain the great objects of penitentiary punishment, the prevention of crimes, and the reformation of offenders. To Pennsylvania may be truly said to belong the honour of having been first to suggest this benevolent system, which she has carried to greater perfection than any other government. A system which has been adopted with more or less success by her sister states as they have more closely or remotely adhered to its great principles, a system to which a decided preference has been given over every other by distinguished missions for the examination of it from abroad and which may be truly said to be the admiration of the philosopher and statesman in every part of the civilized world.

Cultivating as we should a just state pride of every superiority in moral or political excellence which characterizes us as a people, we should remember the obligations which it imposes upon us still to be foremost to maintain and increase it.

#### — A SUPPLEMENT

To an act entitled "A further supplement to the act entitled An act to reform the penal laws of this Commonwealth."

Section 1. Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in General Assembly met, and it is hereby enacted by the authority of the same, That the judges of the Supreme Court of the State shall, at the first term of any Supreme Court which shall be held in the eastern district, after the passage of this act, appoint nine taxable citizens of Pennsylvania, residing in the city or county of Philadelphia, to be inspectors of the eastern State Penitentiary, three of whom shall be appointed to serve one year, three two years, and three three years, and until their successors shall be appointed; and the said judges

\*See next number.

shall annually thereafter appoint three such taxable citizens as aforesaid, to be inspectors in the room of those whose office expires, so that one-third of the said board of inspectors shall be annually appointed to serve for three years; and in case of any vacancy, occasioned by death, resignation or refusal to serve, or otherwise, the same shall be supplied by said judges as soon as conveniently may be.

Section 2. The said inspectors shall form a board, and shall do and perform all things which by law, the board of inspectors of the said penitentiary are now required to do and perform, and they, and the board of inspectors of the Western State Penitentiary, respectively, shall, within six months after the passage of this act, make such rules for the internal government and regulation of the discipline and good order of the said penitentiaries, as may not be inconsistent with the principles of solitary confinement, as set forth and declared by the act to which this is a supplement, and they shall have power to alter the said rules from time to time, as they may judge best for the good government of the said penitentiaries.

Section 3. The warden shall, by and with the advice and consent of the board of inspectors of the Eastern State Penitentiary, appoint the under keepers or overseers of the same, who shall be dismissed only by the board of inspectors.

Section 4. The physician for the institution shall have power, from time to time, by and with the advice and consent of the board of inspectors, to appoint two assistants, and remove them when he thinks proper so to do, but the said assistants shall receive no compensation for their services.

Section 5. The board of inspectors shall appoint, from time to time, a religious instructor of the prisoners, and fix his salary, and he shall do and perform all the duties enjoined upon him by the act to which this is a supplement.

Section 6. The court of Oyer and Terminer held in and for the city and county of Philadelphia, shall, at each successive term after the passage of this act, appoint five of the grand jurors empanelled at that term, who shall visit the Eastern State Penitentiary, and during such visit have the power and authority of official visitors, and they shall make report of such visit to the said court: the district attorneys of the United States for the eastern and western districts of Pennsylvania, shall be official visitors of the eastern and western State Penitentiaries.

Section 7. No warden, under-keeper or overseer of the eastern or western State Penitentiaries, shall at any time be concerned or employed in any other business, and if he should become so concerned, he shall be dismissed from office.

Section 8. No work shall be done by the convicts for and to the order of any inspector, warden, under-keeper or overseer: Provided however, That this shall be understood not to prohibit the purchase by any officers of any articles made in the said Penitentiaries for sale.

Section 9. The Governor may cause notice to be given of any application for a pardon of a convict, by an advertisement published in the county in which the said convict was convicted, or, if no papers be published therein, then in a newspaper published nearest thereto, once a week, for six weeks in succession, the expense of which notice shall be paid by the commissioners of such county in which the convict was convicted, out of the county funds.

(To be concluded.)

## REFORM CONVENTION.

AN ACT to provide for calling a convention with limited powers.

Section 1. That for the purpose of ascertaining the sense of the citizens of this commonwealth, on the expediency of calling a convention of delegates to be

elected by the people, with authority to submit amendments to the State Constitution to a vote of the people for their ratification or rejection, and with no other or greater powers whatsoever. It shall be the duty of each of the inspectors of votes for the several townships, wards and districts in this commonwealth at the next general election, to receive tickets, either written or printed, from the citizens thereof qualified to vote at such general election, and to deposit them in a proper box or boxes, to be for that purpose provided by the proper officers; which tickets shall be labelled on the outside with the word "Convention," and those who are favourable to a convention to be elected as aforesaid, with limited powers as aforesaid, may express their desire by voting each one written or printed ticket or ballot containing the words: "For a convention to submit its proceedings to a vote of the people," and those who are opposed to such convention may express their opposition by voting each one printed or written ticket, or ballot containing the words, "Against a convention," and all tickets containing the words, "For a convention," and all containing the words, "Against a convention," shall be counted and returned whether other words be or be not added.

Section 2. The said election shall in all respects be conducted as the general elections of this Commonwealth are now conducted, and it shall be the duty of the return judges of the respective counties thereof, first having carefully ascertained the number of votes given for or against the calling of a convention in the manner aforesaid, to make out duplicate returns thereof, expressed in words at length and not in figures, only one of which returns so made out shall be lodged in the prothonotary's office of the proper county, and the other sealed and directed to the Speaker of the Senate, which shall be by one of the said judges delivered to the sheriff with the other returns required by law to be transmitted to the secretary of the commonwealth, whose duty it shall be to transmit the same therewith, and the Speaker of the Senate shall open and publish the same in the presence of the members of the two Houses of the Legislature on the second Tuesday of December next.

Section 3. It shall be the duty of the secretary of the commonwealth to transmit a copy of this act to the commissioners of each county in the state, who, on receipt of the same, shall publish it at the expense of the county, at least once a week for six successive weeks in two or more newspapers, printed in the said county, and the sheriff of each county in the proclamation to be by him published, of the holding of the next general election, shall give notice that votes will be given for or against the calling of a convention as aforesaid.

Pittsburgh, Pa April 2, 1835.

THE PASSENGER CANAL PACKET LINE.—The new and beautiful passenger Packet Boat *Pittsburgh*, of *Johnstown*, Lee, Master, left this place this morning for the Portage rail road.

QUICK TRIP.—The steam boat *Arabian*, Forsyth, Master, arrived here yesterday, from Louisville. It was but nine days and one hour in making the trip from Pittsburgh to Louisville and back. She was full of freight and passengers, both down and up.—*Gazette*.

April 9, 1835.

ARRIVAL FROM PITTSBURGH.—Yesterday the Canal Boat, *Sarah Tiers*, belonging to the Pittsburgh Transportation Line, arrived at their ware house Chesnut street wharf, Schuylkill, freighted with a full cargo from Pittsburgh; being the first arrival this season by the Canals and Rail Road.

## CANALS AND RAIL ROADS COMPARED.

(See Register, page 247.)

## A.

*Description and Cost of certain Canals and Rail Roads in England, and the prices of Stock at various periods.*

<i>Names of the several Canals, Rail Roads and Lines of Navigation.</i>	<i>Cost per mile.</i>	<i>Length of each Canal in miles.</i>	<i>Lockage in feet.</i>	<i>Original cost of each share in pounds sterling.</i>	<i>Price of each share in 1821.</i>	<i>Price of the same in March, 1828.</i>	<i>Price of each share, November 1, 1831.</i>	<i>Price of each share in 1833.</i>	<i>Price of each share, Oct. 21, 1834.</i>
Ashton and Oldham, . . .	£15,720	11	152	£97½	0	0	£ 0	£ 160	£160
Ashby de-la-Zouch, . . .	4,186	40	0	113	0	0	0	74	65
Barnsley, . . .	6,466	15	120	160	300	0	210	290	272
Birmingham, . . .	5,111	22½	204	100	203	565	244	0	235
Bridgewater, . . .	00	40	82	0	0	0	0	0	0
Chesterfield, . . .	3,478	46	380	100	150	120	170	0	0
Coventry, . . .	4,444	27	96	100	1,200	999	750	610	806
Cromford, . . .	4,444	18	80	100	400	0	410	0	0
Chelmer and Black Water, . .	3,077	13	0	100	0	0	0	102	102
Derby, . . .	10,000	9	78	100	150	0	120	0	0
Dudley, . . .	15,852	13	0	100	0	0	0	60	67
Ere wash, . . .	00	11½	108½	100	1,400	1,000	600	0	0
Ellsmere and Chester, . . .	7,017	57	0	133	0	0	0	80	87
Forth and Clyde, . . .	12,043	35	321	100	570	0	600	560	560
Glamorganshire, . . .	2,400	25	300	100	250	0	290	290	290
Grand Junction, . . .	21,390	93½	796	100	307	218	235	241	242
Grantham, . . .	3,348	33½	140	150	215	0	195	202	202
Grand Derbentures, . . .	00	00	0	100	0	0	0	0	76
Grand Union, . . .	00	00	0	100	0	0	0	23	23
Kennet and Avon, . . .	5,384	78	263	39½	0	0	0	28½	25½
Leeds and Liverpool, . . .	6,153	130	841	100	395	278	405	452½	515
Do. new, . . .	00	0	0	80	0	0	0	0	0
Leicester, . . .	3,907	21½	230	100	325	260	211	185	170
Lancaster, . . .	8,105	75½	287	47½	0	0	0	27	25
Leicester and Northampton, . .	6,857	43½	307½	83½	0	0	0	82	82
Loughborough, . . .	736	9½	41	100	4,000	2,400	2,550	1,820	0
Melton and Mowbray, . . .	00	0	0	100	240	170	190	190	200
Mersey and Erwell, . . .	1,000	50	0	100	825	650	525	720	0
Monmouthshire, . . .	15,512	17½	1,057	100	215	0	208	0	191
Monkland, . . .	841	12	96	100	0	0	90	0	0
Montgomeryshire, . . .	3,407	27	0	100	0	0	0	86	90
Neath, . . .	2,500	14	0	100	350	0	300	0	300
Nottingham, . . .	5,000	15	0	150	290	0	245	0	0
Oxford, . . .	3,473	91½	269	100	620	640	510	0	610
Peak Forest, . . .	6,521	23	0	78	0	0	0	71	90
Regents or London, . . .	57,143	7	90	33½	0	0	0	17	17
Rochdale, . . .	8,842	33	613½	85	0	0	0	0	124½
Shrewsbury, . . .	4,000	17½	155	125	210	0	205	255	205
Shropshire, . . .	6,333	7½	453	125	135	0	140	136	106
Somerset Coal, . . .	10,571	17½	138	50	170	0	160	0	170
Somerset Lock Fund, . . .	00	0	0	12½	0	0	0	13	13
Stafford and Worcester, . . .	2,150	46½	394	140	800	642	155	600	645½
Stourbridge, . . .	6,000	5	191	145	220	0	220	200	0
Stroudwater, . . .	2,506	8	108	150	450	0	480	525	525
Swansea, . . .	5,142	17½	366	100	280	0	203	220	215
Trent and Mersey, . . .	3,594	93	778	100	820	900	620	660	640
Warwick and Birmingham, . . .	7,200	25	0	100	265	210	230	280	280
Warwick and Napton, . . .	8,666	15	0	100	205	235	210	210	0
Wyrley and Essington, . . .	6,956	23	288	125	160	0	115	115	80
Worcester and Birmingham, . .	16,215	29	428	78½	0	0	0	87½	86
<i>Cost of Rail ways in England, and the prices of stock at the same dates.</i>									
Liverpool and Manchester, . . .	00	0	0	100	0	0	205	210	199
Do. do. . .	00	31	379	25	0	0	0	51½	48½
Do. do. . .	00	0	0	25	0	0	0	51	48½
Clarence, (Durham,) . . .	00	0	0	100	0	0	65	100	70
Severn and Wye, . . .	00	0	0	50	0	23	117	16½	19½
Stockton and Darlington, . . .	5,200	25	0	100	0	160	230	297½	250

\* The fractional parts of a £ in the column of cost per mile, omitted.



From the Commercial Herald.

## NEW TONNAGE BUILT AT THE PORT OF PHILADELPHIA.

We have prepared from authentic documents, the following statement of the names, tonnage and number of vessels built annually, at the Port of Philadelphia during the last ten years. It will prove a useful reference.

1825.

Tons.

## Brigs—Continued.

Treaty 240.70

Wizard 163.77

Prince of Guinea 261.81

Matilda 130.44

American 181.92

Constitution 198.67

Eric 278.14

John Wesley, 185.63

SCHOONERS.

Hope 64.75

Caroline 64.63

Good Friends, 81.70

John Sexton 32.91

Packet 98.53

STEAM-BOAT.

Norfolk 254.26

5 SLOOPS 204.47

1826.

## Schooners—Continued.

Victory 17.18

Triton 92.45

Ellen 61.13

First attempt 8.02

Genl. Marion 18.30

Rising Sun 7.56

Schuykill 27.27

Robert Morris 21.60

Champion 65.15

North America 18.40

Ann 62.02

Emily Davis 114.09

Reaper 87.21

Chancellor 74.93

James 33.03

STEAM-BOATS.

Philadelphia 250.37

Convoy 91.28

New Castle 253.46

Albany 306.36

15 SLOOPS 372.26

1827.

## Schooners—Continued.

Edwin Forrest 22.77

Hetty Ann 26.24

Rhoda 36.74

Mark 73.63

James Starr 59.68

Globe 15.86

Triumph 71.72

Maria 16.84

Virginia 127.55

Elizabeth 60.05

Amanda &amp; Sarah 21.82

Mexican 106.00

John C. Calhoun 117.15

STEAM-BOAT.

New York 247.11

7 SLOOPS 310.88

1828.

## SHIPS.

Pearl 288.15

Walter 474.92

North Star 398.81

Washington 369.43

Altamaha 298.69

Thames 413.94

Chester 326.33

Monongahela 509.65

Chandler Price 440.94

Charles Wharton 396.07

## BRIGS.

Feliciana 282.89

Commerce 177.50

Mary 130.00

Panama 210.84

## SHIPS.

Allegheny 413.81

Paoli 309.85

## BRIGS

J. Ashman 227.70

Robert Morris 240.94

Caraccas 146.82

Pacific 229.04

Ella 235.23

Montgomery 142.45

Dolphin 117.57

Tola 146.51

## Brigs—Continued.

Tamaqua 124.72

Rebecca Huddell 159.71

Mary 135.29

SCHOONERS.

U.S. Sc'r. Pulaski 103.56

Hiram 99.64

Sun 105.38

Hannah 78.36

Susan 27.24

Ann 59.69

Maiden 94.64

Ann Eliza L. 110.46

STEAM-BOAT.

Philadelphia 230.93

13 SLOOPS 399.32

1829.

## SCHOONERS.

Defiance 72.60

Columbia 73.85

Margaret 23.82

Teaser 32.22

Volta 120.04

Pelican 100.49

STEAM-BOATS.

William Penn 412.50

Wilmington 229.01

7 SLOOPS 232.00

1830.

## SHIPS.

Philip the I. 293.81

Pennsylvania 259.82

## BRIGS.

Elm 258.42

Bacchus 200.22

Daniel H. Miller 120.94

## SCHOONERS.

General Pike 47.38

Charles Millard 50.43

Industry 76.56

Zara 50.38

## Schooners—Continued.

William D. Chester 49.68

Union 90.44

Henry Clay 46.09

Defiance 97.44

Spica 66.72

STEAM-BOATS.

Geo. Washington 278.71

Norfolk 269.37

Robert Morris 279.82

Maryland 50.47

13 SLOOPS 339.02

1831.

## SHIPS.

Liberty 381.76

Maria 400.40

John Sergeant 384.11

United States 448.64

Archer 321.78

## BRIGS.

Eutaw 319.48

Rolla 180.03

Paragon 238.61

## SCHOONERS.

Thomas Chalkley 34.18

Chester 69.41

Bernard 5.85

James &amp; Catharine 70.14

Betsy 56.92

Bee 60.93

Virginia Trader 94.76

9 SLOOPS 356.91

1832.

## SHIPS.

Hope 407.22

Morrison 565.82

Commerce 439.82

Virginia 320.46

## BRIG.

Henrietta 120.15

## SCHOONERS.

Ceres 137.78

William V. Coulter 127.17

## Schooners—Continued.

Caroline 41.48

Henry 63.46

Caroline 84.73

Maria 23.74

Elizabeth &amp; Rebecca 88.93

STEAM BOAT.

General Lincoln 125.48

13 SLOOPS 673.88

1833.

## SHIPS.

Delaware 479.44

Susquehanna 585.64

Julia 394.82

Eagle 221.44

## Ships—Continued.

Margaret 244.32

Girard 485.34

Kensington 494.43

SHIPS.	
Atlantic	290.51
Bolivar	479.60
Florian	302.91
Asia	396.56
Mary	348.10
Junata	286.85
La Plata	1651.92
Ohio	351.86
BRIGS.	
Victory	123.46
Forest	217.14
Hunter	215.89
Lydia Davis,	97.36
Agorea	154.43
Lehigh	149.39
Genl. Sucre	145.53
Emily	143.68

CORVETTE.	
Kensington	1418.18
SHIPS.	
Cambria	262.20
Benjamin Morgan	395.81
Ajax	627.07
Lafayette	260.39
BARQUE.	
Wyoming	299.57
BRIGS.	
Blackbird	216.92
Pegasus	145.92
Maria	145.92
Henry	193.49
Herminia	154.70
Globe	260.30
Attakapas	149.40
Mary	123.81
Sophia	197.92
Latona	353.01
SCHOONERS.	
Speedwell	54.87
Caledonia	18.82

SHIPS.	
Louisiana	296.69
Missouri	270.89
BRIGS.	
Zelia	187.22
Independence	274.00
Gannicleft	200.10
Chilian	261.56
Liberia	192.73
Ocean	172.46
Louis	140.06
SCHOONERS.	
Esther & Sally	73.56
Susan	16.42
Diana	71.49
Emma	124.77
United States	24.49

BARQUE.		SCHOONERS.		1834.	
Madeline	293.03	Veto	5.18	SHIP.	Brigs—Continued.
BRIGS.		Harriet Porter	67.61	Octorara	Elm 131.23
Pedraza	139.22	Ellen	70.64	BARQUE.	SCHOONERS.
Santiago	126.25	Adelaide	55.89	Josephine	Purdy 91.27
James Coulter	121.32	Ada	152.18	BRIGS.	Robert Morris 32.05
Star	128.88	STEAM-BOAT.		Comet	William Henry 65.64
Violet	128.84	Ohio	314.29	James Harper	10 SLOOPS 508.92
		8 SLOOPS.	616.76	Harper.	260.30

## RECAPITULATION.

Years	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834
	Tons.	95ths.	Tons.	95ths.	Tons.	95ths.	Tons.	95ths.	Tons.	95ths.
Ships and Barques	4,108.56	3,263.38	567.63	3,917.23	723.71	553.68	1,936.79	1,733.42	3,198.61	869.25
Brigs	2,888.41	1,941.69	1,428.23	1,221.15	1,486.46	579.63	738.17	120.15	644.61	676.65
Schooners	342.67	782.33	1,061.28	679.17	443.17	584.32	392.39	567.49	354.60	189.01
Sloops	204.47	372.26	310.88	399.32	232.00	339.02	356.91	673.88	616.76	508.92
Steamboats	254.26	901.52	247.11	230.93	641.51	877.47	.....	125.48	314.29	.....

Total Tons.	Ships.	Brigs.	Schooners.	Sloops.	Steamboats.
	20,872.51	11,725.35	5,373.58	4,014.67	3,592.72

GRAND TOTAL....45,578 Tons 93 95ths.

Years	Ships.	Barques.	Brigs.	Schooners.	Sloops.	Steamboats.
1825	8		16	5	5	1
1826	5	1	10	17	15	4
1827	2		7	18	7	1
1828	10		7	8	13	1
1829	2		8	6	7	2
1830	2		3	9	13	4
1831	5		3	7	9	
1832	4		1	7	13	1
1833	7	1	5	5	8	1
1834	1	1	4	3	10	
Total....	46	3	64	85	100	15

The business this year, in Ship Building, promises to be very considerable.

There are at present on the stocks, and in an advanced state in Kensington,

- 1 Barque of about 260 tons.
- 3 Schooners, each about 114 tons.
- 1 Steamboat, 360 tons.
- 1 Steamboat, tonnage not ascertained.
- 3 Steam Tow Boats, one of them of 230 tons.
- 1 Steamboat, launched, and nearly finished.
- 1 do rebuilt to be launched to-day.

In Southwark, brig Artamon, of about 200 tons—launched on Thursday last.

## IMPROVEMENT.

HOLLIDAYSBURG, April 12, 1835.

To the Editor of the Columbia Spy:

Dear Sir,—Through the columns of your paper, permit me to communicate a few remarks upon the facilities now offered to travellers, by Leech & Co. in their line of boats on the Pennsylvania Canal. In remarking on this line, it is not designed to undervalue the advantages on other lines, nor on other boats. The writer has no interest to serve in this communication, but the public welfare. To all concerned he is a stranger, and a simple statement of facts is all that is designed. On Friday last, about 6 o'clock P. M. the packet boat New York, Mr. P. L. Wood, master, left Columbia, having on board 140 passengers, gentlemen and ladies

from different sections of the Union, and a few from trans-atlantic states, occupying various stations of respectability and usefulness in public and private life.—Two of the passengers were clergymen, and many others were professors of religion of different evangelical denominations, and all were orderly and quiet persons.

At the request of the master of the packet and many of the passengers, after mature deliberation the clergymen, from all the circumstances of the case, deemed it their duty to change their original purpose of leaving the packet on Saturday evening, and to remain on board for the purpose of conducting divine worship during the Sabbath. Divine service was therefore conducted publicly, at half past 10 o'clock, A. M. and at 2 o'clock, P. M. in which all the company united.—

The exercises were solemn and impressive. The whole day wore the aspect of solemnity. The sound of the horn and the hammer and other instruments ordinarily employed in conducting the packet onward, ceased, and the day was quiet. Although the passengers were so numerous, yet, by the prompt, faithful, and kind attention of the master, all were brought through the route with safety and great satisfaction.—To the attention and kindness of Mr. Wood, the company felt peculiarly obligated—and as an evidence of their feelings of obligation, on their near approach to this place, assembled on deck, and unanimously adopted the following resolution, viz.

Resolved, That in consideration of the kind attentions and courteous manners of Mr. B. L. Wood, master of the packet boat New York, to the passengers committed to his care, from Columbia to Hollidaysburg, we deem it due both to him, and our own feelings, publicly to express to him our thanks, and also to recommend the boat to persons who may have occasion to visit the far west.

Sined by

A. B. SHAW,  
A. GLINES,

*Of Massachusetts, in behalf of the Company of passengers.*

Of the number that left Columbia, 112 were landed at this place, all going to the West. The packet arrived this afternoon at 3 o'clock—passing the whole line, 171 miles, in sixty-nine hours. There is perhaps propriety in saying while the facilities of this line are many—that the vast amount of travelling on it to the West, calls upon the company to increase their efforts for accommodating the public—could longer cabins be constructed in the packets, or extra packets be in readiness when needed, and could additional cars for the rail roads be provided, so that passengers could be forwarded immediately in all cases of arrival, doubtless the company would be well rewarded by the extra numbers that would be induced to take this in preference to any other route to the valley of the Mississippi—a failure in attention to these things may seriously affect the interests of the company in future. That they may succeed in their efforts, and obtain a due share of patronage, is the sincere desire of one of the hundred and forty passengers.

Yours respectfully,

X. Y.

The following Act passed both Houses of the Legislature, April 4, 1835.

An Act to graduate the Lands on which money is due and unpaid to the commonwealth of Pennsylvania.

Section 1. Be it enacted by the Senate and House of Representatives of the commonwealth of Pennsylvania in General Assembly met, and it is hereby enacted by the authority of the same, that the county commissioners of the several counties of this commonwealth shall be a board of appraisers for the following purpose, viz. It shall be their duty to appraise all lands on which any purchase money is due to this commonwealth, if desired so to do by the owner or owners thereof, a majority of the board to view the ground, the expense of such appraisement to be paid by the owner of the land.

Section 2. The board or a majority of them shall appraise such land or lands for its cash value, and shall make a table of rates, numbers one, two, three, four. All land valued at ten dollars per acre and upwards, shall be rated number one. All land valued at more than seven and less than ten dollars per acre shall be rated number two. All lands valued at more than four dollars and not more than seven dollars per acre, shall be rated number three. All lands valued at four dollars or less per acre, shall be rated number four. Provided, that in making the valuation of lands the value of the buildings thereon erected shall be deducted.

Section 3. All land rated number one, shall pay the

amount of purchase money with six per cent. per annum interest thereon. Number two shall pay such purchase money and four and one half per cent. per annum interest thereon. Number three shall pay such purchase money and three per cent. per annum interest thereon. Number four shall pay the original purchase money without interest.

Section 4. The board of appraisers shall keep a record of their valuations in a book to be kept for that purpose, and a certified copy thereof under seal shall be good evidence on an application to procure patents and pay the purchase money due the commonwealth.

Section 5. The appraisers before entering on the duties enjoined on them by this act, shall be sworn or affirmed that they will justly and impartially appraise the land in all cases where called to act, and shall be allowed one dollar and fifty cents per day for each day spent, and four cents for each mile circular travelled by them in discharging the duties enjoined by this act.

Section 6. This act shall continue in force three years and no longer.

Section 7. All laws of this commonwealth are hereby repealed so far as they are altered by this act, and no further.

*To the Senate and House of Representatives of the Commonwealth of Pennsylvania.*

Your Memorialists Respectfully Represent :

That they see with surprise a bill reported to your honorable bodies for erecting a Bridge across the River Schuylkill at some point below the city of Philadelphia, which they beg leave to remonstrate against for the following reasons:

Because the river Schuylkill is a common highway for the benefit of all the citizens of the State; any thing therefore which obstructs it not only injures Philadelphia, but nearly the whole trade of Pennsylvania. Vessels of from two to three hundred tons, now load at its wharves with coal and other productions, and depart without delay or inconvenience—which could not be the case if this bridge is built—as canals around abutments of bridges have been found in all cases to present obstacles to navigation.

Because extensive wharves and warehouses have been made on the river for the accommodation of the coal and country trade, which would be greatly injured, if not rendered useless by such a work.

Because such a bridge is not necessary either for travelling or commerce, there being already three bridges over that river; and if the object as alleged is, to carry the trade to the Southwark Rail Road, the shortest possible way to accomplish it, is to lay rails on the piers of the Permanent Bridge at Market street; from thence to join the Rail Road at Broad street, which joins the Southwark Rail Road.

Because a bridge will eventually cut off the entire trade of the city from the Schuylkill. Vessels of the larger class can only pass draw bridges at certain state of the tides, thereby creating great detention, subjecting them to injury from running foul, breaking their rigging, &c. &c. Captains already complain of the one at Grey's Ferry below the city, and if another is added, your memorialists are fearful they would object to going up the Schuylkill altogether.

Because if the trade of the Schuylkill for sea vessels is interrupted, it must throw the burthen on country produce in transporting it over the city to the Delaware for exportation—which additional expense will fall exclusively upon country merchants and farmers. To the Schuylkill coal trade such a bridge will be almost total destruction, as the article is entirely exported from that River.

Because your memorialists are informed that an Act of Incorporation is now in existence, for building a bridge at Grey's Ferry, 80 feet high, which would answer the purpose without interrupting commerce.

*All which is respectfully submitted.*

## METEOROLOGICAL REGISTER.

Extract from the Meteorological Register, taken at the State Capital—Harrisburg, Pennsylvania.

By JAMES WRIGHT, Librarian.

AUGUST, 1834.

Day of the month.	Day of the week.	Sun rise.	1 o'clock, P. M.	Sun set.	Mean.	Height at sun rise.	Height at 1 o'clock, P. M.	Height at sun set.	Mean height.	WINDS.	STATE OF THE WEATHER.
THERMOMETER.						BAROMETER.					
1	Friday,	68	78	78	75	29.72	73	75	29.73	NW	Clear day.
2	Saturday,	73	75	77	76		77	79	80	SE	Cloudy day.
3	Sunday,	68	80	82	77	80	80	80	80	W	Clear day.
4	Monday,	70	84	84	79	83	80	77	80	W	do. do.
5	Tuesday,	72	84	85	80	80	80	80	80	W	do. do.
6	Wednesday,	75	85	87	82	82	83	77	81	W	do. do.
7	Thursday,	72	88	87	82	75	70	68	71	W	do. do.
8	Friday,	75	88	82	82	65	63	60	63	W	Clear—Cloudy.
9	Saturday,	72	88	86	82	60	60	60	60	W	Clear—Cloudy—rain at night.
10	Sunday,	72	82	83	79	70	70	70	70	SE	Clear day—Sb'ry. at n't. th. & lt.
11	Monday,	76	84	83	83	74	74	74	74	W	Clear day
12	Tuesday,	73	91	88	85	70	66	60	65	W	Clear—Shower—rain at night
13	Wednesday,	74	83	82	80	72	75	78	75	W	Clear day
14	Thursday,	72	81	82	78	70	63	63	65	NW	Cloudy day.
15	Friday,	68	77	72	72	63	68	70	67	NW	Sun & Clouds.
16	Saturday,	66	75	73	72	80	83	84	82	W	Clear day
17	Sunday,	65	75	79	73	89	80	76	82	SE	Cloudy—Clear.
18	Monday,	74	85	83	80	70	69	73	71	SW	Clear day
19	Tuesday,	64	75	75	71	77	70	68	72	NW	do. do.
20	Wednesday,	65	76	75	72	73	76	70	73	NW	do. do.
21	Thursday,	66	77	75	73	73	73	73	73	NW	do. do.
22	Friday,	64	79	76	73	73	82	80	78	NW	do. do.
23	Saturday,	64	82	81	76	78	80	80	79	SE	do. do.
24	Sunday,	68	82	80	77	78	78	72	76	NW	Clear—Cloudy.
25	Monday,	63	73	73	70	86	83	80	83	NW	Clear day
26	Tuesday,	60	73	74	69	82	80	80	81	NW	Cloudy day
27	Wednesday,	62	73	73	69	80	84	86	83	N	Clear day
28	Thursday,	55	70	70	65	92	92	92	92	N	do. do.
29	Friday,	60	73	74	69	92	92	92	92	SE	Cloudy day
30	Saturday,	63	73	72	69	92	92	90	91	SE	do. do.
31	Sunday,	63	70	73	69	92	88	84	88	SE	do. do.

## Thermometer.

Maximum on the 12th,	85°
Minimum on the 26th,	69
Difference,	16
Mean,	75

## Barometer.

Maximum on the 28th,	29.92 inches.
Minimum on the 12th,	29.65 "
Difference,	00.26 "
Mean,	29.77 "

## UNION CANAL.

Statement of articles which have passed the Union Canal, since the opening of the Navigation on the 19th of March, up to the 19th of April.

Plaster,	268,677 pounds.
Fish,	466,512 "
Salt,	200,717 "
Merchandise,	2,366,507 "
Flour,	3,662,526* "
Lumber,	1,361,800 "
Shingles,	491,400 "
Coal,	2,102,899 "
Wheat,	4,172,332† "
Iron,	2,913,698 "
Whiskey,	404,486† "
Sundries consisting of staves tobacco, flaxseed, Cloverseed, bacon, ore, lime, limestone, leather,	3,258,501 "

\* Equal to 18,312 bbls. 26,770,055 "  
† 69,533 bushels. ‡ 50,560 gallons.—*Com. Herald.*

## THE REGISTER.

PHILADELPHIA, APRIL 25, 1835.

We have by request inserted several columns of the tables attached to the report of the Commissioners of New York, on Canals and Rail Roads, which could not be printed entire.

Printed every Saturday morning by WILLIAM F. GEDDES, No. 9 Library street.

The publication office of the Register has been removed from Franklin Place, to No. 61, in the Arcade, Western Avenue, up stairs.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.--NO. 18.

PHILADELPHIA, MAY 2, 1835.

No. 382.

## HOUSE OF REFUGE.

*To the Senate and House of Representatives of the Commonwealth of Pennsylvania.*

The Managers of the House of Refuge, in presenting their Annual Report, conformably to the requisitions of the charter, cannot but congratulate the friends of the Institution, among whom they have great pleasure to rank your honorable bodies, upon the increased success of this noble experiment of charity which has originated and been fostered by the exertions and aid of the benevolent, and by none more than by the accredited organs of the people of this commonwealth. The Managers regarding with attention and anxiety every event and progress of opinion calculated to affect the interests of an institution whose welfare is dear to their hearts, have seen with great satisfaction, those prejudices which originally threatened to trammel its operations and limit its usefulness, gradually receding before that conviction of its good design and appreciations of its important results, reaching the hearts of all and animating to renewed interest in its behalf.

It is with pleasure we recur to the late visit of a portion of the Legislature, satisfied that a personal investigation of the organization, conduct, economy and regulations of the House, in all its departments, and with regard to its subjects, is the surest guarantee of an increase of that confidence, in the Directors and Officers of the Institution, which you have hitherto been pleased most generously to manifest. The difficulties which have been hitherto encountered in devising suitable occupations for the boys, have now, we have every reason to hope, been remedied. The employments consist of Shoemaking, Bookbinding, the manufacture of brass nails, and the furniture of umbrellas, for the larger and more skillful boys, in all which trades they exhibit much diligence and rapid improvement;—while the smaller and less capable are profitably employed in the making of cane seats for chairs, and forming the split rattan to a suitable size and form for bonnet makers. The managers respectfully appeal to the recollections of those gentlemen who have lately visited the House, for proof of the skill, diligence and cheerfulness manifested by those employed in these various occupations. In disposing of those who are subjected to the discipline of the House among the different trades, consideration is invariably had of their former habits of life, their apparent skill, general capability and inclination,—though always tempered by the discretion of the Superintendent. The employment of the girls is

confined to household work, the making and mending of the clothing for the inmates, and the necessary domestic occupations for ensuring the comfort and cleanliness of their department.

From this physical labor, the inmates are directed to that intellectual employment calculated to combine in a happy degree with the manual skill which they are thus acquiring and to render them better capable of retaining that rank in the society of their fellows, to which the managers confidently trust the Institution may be the blessed instrument of introducing them.—The schools are now in a more satisfactory state of usefulness and improvement than it has yet been our privilege to announce. The present teacher has the confidence of the Board, and by his unremitting attention and interest in his department, gives earnest of successful results. The report annexed will show the present state of this portion of the institution.

The duties of the week being thus pointed out, and regularly fulfilled, the subjects of the House are upon the Sabbath, twice assembled in the chapel, engaging in the worship of God and listening to the expounding of the truth of the Gospel. Benevolent clergymen of different denominations devote themselves to this religious instruction of the inmates, and we are from experience justified in believing, with much success. In the Sunday school, the exertions of gentlemen, anxious for the spiritual welfare of the beings placed under our care, are continual, and improvement is evident in attention, interest and knowledge.

When the individual has been, in the opinion of the Managers, reformed by the discipline of the House; and gives promise of future correct deportment and a desire to attain his proper station in the community, he is, in the discretion of a committee, placed by indentures under the charge of a suitable master, always with a view of consonance with his habits and inclinations.

The Legislature may thus see the entire scope and objects of the House of Refuge. Preserving the original plan of its founders, disclaiming all analogy to the name of Prison, the managers confidently trust that the House has become a school of reform and salutary moral discipline. To rescue the youthful from the haunts of vice or the pursuits of idleness; to place a barrier between them and their associates in crime or folly; to actuate them to the practice and habit of industry, by directing them in the way of useful employment; to instruct their minds in those branches of knowledge best calculated for their advancement in

life; to impress upon their softened hearts the knowledge of the Deity and the truths of religion; and to finally confide them to the charge of approved employers, to carry out the designs of our institution, by preserving them in those paths, to which our discipline has been calculated to direct them, has been and will continue to be the sole object of the care of the gentlemen to whose administration the affairs of the House are entrusted.

Our domestic arrangements have not been essentially changed during the past year. The Superintendent, the Matron, and subordinate officers of the House continue in their charge with the same ability and happy consequences as formerly. The managers congratulate all the friends of the Institution upon their acquisition.

The female department is particularly superintended by the "Ladies Committee," who devote themselves with much advantage to this duty. A committee of the Managers regularly visit the House twice a week to examine cases of those recently admitted, exercise a general supervision of its affairs—the results of which are weekly reported to the Executive Committee and to the Board at each monthly meeting.

The Physicians exhibit an interest in the sick and a success in their treatment, which entitle them to the most favorable notice of the Board. We regret to announce that the mortality during the past year has been greater than formerly, though principally produced by constitutional causes and unconnected with the general health of the House.

The annexed statements of the general condition of the House, its receipts and expenditures will exhibit to the Legislature details most important for your consideration.

All which is respectfully submitted.

By order of the Board of Managers of the House of Refuge.

THOMAS ASTLEY,

Vice President.

ATTESTED

JAMES J. BARCLAY, Secretary.

Philad. Jan. 1, 1835.

*To the Managers of the House of Refuge the Superintendent presents the following:*

The number of subjects admitted from Jan. 1, 1834, to Jan. 1, 1835, is as follows, viz:

	Boys.	Girls.	Total.
Committed by Courts and Magistrates,	74	36	110
Returned having been indentured,	7	4	11
do do voluntarily	3	0	3
do do on account of disease	1	0	1
	85	40	125
<i>Discharged.</i>			
By indenture	51	8	59
Of age	1	8	9
Returned to friends	16	2	18

	Boys.	Girls.	Total.
Sent to Almshouse	3	3	6
As improper subjects	7	5	12
Escaped (one since returned)	2	0	2
	80	26	106

Remaining in the Institution, January 1, 1835,

	Boys.	Girls.	Total.
	104	61	165

One girl who died was in an advanced stage of consumption when she was received into the institution.

The average age of boys received is about 14 years 7 months—Girls—14 years 5 months.

One has been received from Cumberland county, one from Columbia county, four from Lancaster county, one from Susquehanna county and two from Northampton county—the remainder were from the city and county of Philadelphia.

The number of subjects from distant counties is greater than in the preceding year, showing an increased attention to the merits of the institution in the interior of the state.

The boys are employed at bookbinding, shoemaking—and in the manufacture of brass nails, umbrella furniture, cane chair seats, and bonnet cane.

The girls are employed at cooking, sewing, knitting, and the various kinds of housewifery required in the establishment.

Of the boys who have been indentured—6 are to be woolen manufacturers; 23 farmers; 2 combmakers; 3 blacksmiths; 1 oak cooper; 1 clerk; 1 printer; 1 tanner and currier; 1 carpenter; 4 screwmakers, 1 painter, 1 tin and iron plate worker; 3 seamen; 1 miller; and 2 bout and shoemakers.

The girls are all to learn housewifery.

All which is respectfully submitted by

EDWIN YOUNG,

Superintendent.

*The teacher of the school in the House of Refuge respectfully presents to the Superintendent the following statement of the condition of the schools.*

The male school consists of 104 pupils who are classed as follows:

CLASS.	NO. OF BOYS.	STUDIES PURSUED.
1	12	Olney's Geography, Arithmetic, and read in Universal class book.
2	9	Arithmetic, and read in Murray's Sequel.
3	11	Arithmetic, and read in Grimshaw's History of U. States.
4	10	Arithmetic, and read in Testament.

CLASS.	NO. OF BOYS.	STUDIES PURSUED.
5	11	Read in the Testament, and spell in Webster's Spelling Book.
6	12	Read in the Testament, and spell in Webster's Spelling Book.
7	8	Read in Webster's Spelling Book.
8	9	Beginning to read in do.
9	12	Spell words of three syllables.
10	10	do one do.— two in alphabet.

In the female school are 61 girls, classed as follows:

CLASS.	NO. OF GIRLS.	STUDIES.
1	11	Woodbridge's Geography,— Arithmetic, and read in English reader.
2	11	Arithmetic, and read in Murray's Introduction.
3	9	Read in the Testament, and learn tables, spell in Webster's.
4	10	do do do
5	6	Read in Webster's Spelling Book.
6	6	Beginning to read in do
7	8	Spell in two syllables.

Forty-two Boys write on paper, and forty on slates.

Thirty-five Girls write on paper, and sixteen on slates.

The boys are in school from 5 to 7½ o'clock in the morning, and from 5½ to 8 in the evening—making 5 hours per day.

The girls attend school in the afternoon, about 3 hours per day—sometimes, of late, they have attended a little longer, perhaps 3½ hours.

Of the number in both schools, that study arithmetic, more than one half have not progressed farther than the simple rules, and of the remaining arithmeticians, but very few have cyphered beyond simple interest.

A very great proportion of the children, when admitted into the school cannot read, and many of them are entirely ignorant of the Alphabet, consequently, it cannot be expected that they will be very far advanced, before they leave the institution, though the most of them progress so far as to read tolerably well, and write a legible hand—and some make considerable proficiency in Geography and Arithmetic.

Z. B. NICHOLS,  
Teacher.

January 1, 1835.

# PHYSICIANS' REPORT.

In accordance with the request of the Board of Managers, the Physicians of the House of Refuge, respectfully submit their report for 1834.

From a careful review of the Medical Record, it appears, that one hundred and forty-five inmates of the House, have been at different times, under medical treatment for the last year. A list of the diseases, together with the number of cases belonging to each class, may prove satisfactory to the Board; and are here inserted for its information, viz: Asthma, 1. Catarrhus, 10. Colica, 2. Consumption, 2. Cholera Epidemica, 1. Cholera Morbus, 12. Chorea, 1. Cephalalgia, 5. Contusio, 1. Cynanche Tonsillaris, 6. Diarrhœa, 37. Dysenteria, 2. Epilepsia, 3. Febris Remittens, 12. Febris Intermittens, 19. Inflammatio Articulorum, 4. Icterus, 1. Hernia, 2. Hepatitis, 1. Herpes, 1.—Neuralgia, 1. Ophthalmia, 3. Otitis, 3. Pleuritis, 7. Phlebitis, 1. Phrenitis, 4. Rheumatismus, 6. Scrofula, 2. Vertigo, 1.—Total, 145. Of this number, we have the melancholy duty, to record the death of 7 as follows: 3 from Inflammation of the Brain, 1 from Cholera Asiatica, 1 from Cholera Morbus, 1 from Consumption, and 1 from Epilepsy—making an unusually large proportion, as compared with former reports, and almost equal to ⅓ of the whole number of fatal cases that have occurred, since the establishment was first opened, for the reception of Juvenile offenders, in 1827. If this event, however, be candidly examined, it will present nothing that is calculated to create unfavorable impressions, as to the salubrity of this Institution. It is true, that indisposition of a slight character, has extensively prevailed during the period now under consideration; and especially, in the summer months; but in this fact, there is nothing of an unusual nature, and is susceptible of a ready and satisfactory explanation, by the prevalence of that mysterious epidemic influence, which so extensively, spread death and consternation over most of the known world. With the exception then, of the fatal cases alluded to, but little serious indisposition has fallen under our observation; and there is an abundant cause for congratulation and thankfulness, to an all-wise and over-ruling Providence, that in the midst of the ravages, occasioned by the Epidemic Cholera in different parts of our country, that of so large a number of individuals as is to be found collected together in the House of Refuge, so many should have escaped the bed of suffering and death.

If a comparison, as to healthfulness, be instituted between the House of Refuge, and other similar institutions in our city, or elsewhere, it will not prove unfavourable to the former, and would afford satisfactory grounds for the conclusion, that in this respect, it is highly favoured, and exempted in as remarkable a degree, from fatal disease, as any other establishment of which we have any knowledge. The simple fact, that eleven inmates only, including those of the present year, have died since the Refuge first opened its doors, until the present period, is sufficient evidence to confirm the above opinion; and to create confidence in those of its friends, and patrons, who have so unremittingly laboured

ed, and sacrificed so much of their time, and money, for the purpose of carrying into full effect, this benevolent scheme, so well adapted to save from hopeless wretchedness and vice, numbers of our neglected, but still interesting portion of youthful population. In order that the Board may be able to estimate correctly, the nature and character of those cases, which proved fatal, a short abstract of each, together, with the evidences of disease, afforded by the examinations after death, is hereby submitted.

The 1st case was that of *J—P—*, aged 12 years. He was admitted into the Refuge, May the 28th, 1833, and seized with chill and fever, pain in the head and back, (the usual attendants of Intermittents) on the 7th of April, 1834. These symptoms continued 48 hours, but were finally removed, by means of Leeches to the temples;—purging, and other appropriate treatment. From this period, he *apparently* recovered, and attended to his school, until the 8th of May following, at which time he was similarly attacked, as in the first instance: he was ordered to be bled, by the Physician, and when visited again in the afternoon, he expressed himself quite relieved. At 9, P. M. he undressed himself and retired to his bed, without conveying, by his conduct or appearance, any suspicion of his near approach to death;—he was found in the morning in a state of stupor, probably, the consequence of convulsions, and shortly after, expired. His head was examined after death, and the following phenomena presented themselves:

Adhesions between the Dura mater and Arachnoid membrane; effusion of coagulable lymph, at the anterior portion of the brain; excessive congestion of the vessels of the Pia Mater;—all indicating a disease of some standing, and not unlikely, the effect of a slow inflammatory action, which had been going on insidiously, from the time of his first attack, three weeks previously to his death.

This case was, certainly, a very interesting and unusual one, when it is considered, that, during the whole interval between the first and second attacks, the patient was able to attend to his school, and participate in the various occupations of the House, with the other boys. No human sagacity, under these circumstances, could have predicted his real condition;—but, there is a consolatory reflection, that the course of treatment, pursued in his case, whilst in the Infirmary, could not have been more appropriate than it was, even if the Physician had suspected the actual state of his brain.

The 2d death that took place, was that of *Z—S—*, aged 17 years. He was admitted into the House, December 31, 1833, and attacked May 22d, 1834, with symptoms of chill and fever, attended with head-ache, sick-stomach, &c., which, obstinately continued, in spite of two applications of cups to the head; two leechings to the temples; one bleeding from the arm; active purging; blistering the scalp, neck, &c. and the free use of Calomel. He lived for 21 days, evincing the most marked symptoms of a cerebral affection, and expired on the 13th of June, 1834. His head was opened after death, and the great cavities of the brain

were found distended, with several ounces of serous effusion, the termination of the previous inflammation; and the central portion of the cerebrum, was much softened. This patient was placed under the most active course of treatment, from the very commencement of his case, for Inflammation of the Brain; and was sedulously attended, both by the Physician and Nurse—afforded every attention, and convenience, that could have been desired, under any circumstances, yet it baffled all attempts to arrest its progress, and terminated in 21 days—having received 33 visits during that period.

*J—W—*, aged 16 years, was the 3d case that died,—he came into the Refuge, March 3d, 1829. It appears from the Medical Record, that on June 16th, 1834, he complained of pain in the head, sick-stomach, and sore throat; for which he was put under treatment, and speedily relieved. His general health, previously to this attack, was very delicate, and he now continued to complain of great debility, and depression of spirits, for which, he was retained in the Infirmary, under the eye of the Medical attendant.—On the 24th, he was seized with obstinate vomiting of bile, in large quantities, but this was soon allayed, and for 3 days, he was comfortable, and gave hopes of a speedy recovery; but, on the 27th inst. he relapsed, and exhibited great prostration, from excessive vomiting and purging. His condition varied for several days, but he ultimately yielded to the force of his disease, and expired July 2d, 1834, after an illness of 16 days. As his disease was one of ordinary occurrence, during the summer months, without any peculiarity, and the weather being excessively hot, he was removed from the House, by his friends, without an examination being made.

*W—D—* was the 4th case which proved fatal. He was admitted February 8th, 1831, and was aged 8 years, at the period of his attack. The Medical Record states, that on the 19th of July, 1834, he had experienced a slight spasmodic affection in his legs, for the two previous nights, accompanied with slight bowel complaint. For these symptoms, he was ordered medicine, and to be carefully watched, though he pursued his usual occupations. On the 20th inst. he felt pretty well, and was free from sick-stomach and diarrhœa; but, towards morning, on the 21st, he was suddenly attacked, (by his own account,) with violent vomiting and purging, and when discovered, by the watchman and door-keeper, he was carried from his dormitory into the Infirmary, in a very cold and prostrated condition. Every means were immediately employed, to arrest the purging, and to produce reaction in the system, but, without much success. The Physician in attendance, saw him at an early hour, and recognised in his case, all the peculiar characteristics of the Asiatic Cholera. He died at 7 in the evening—15 hours from the time he was first seized. In this case, remedies were unremittingly employed; three or four assistants, besides the regular nurse, were constantly at his bedside; and the Physician devoted most of the day to his service, but all in vain. This was the first, and only case of the Asiatic Cholera, which has ever appeared



in this Institution; although much of the premonitory disease prevailed, especially during the summer of 1832; but, by instituting a well regulated diet; free ventilation; purification of the halls and dormitories; in connection with close watching, and prompt treatment, the inmates escaped from that pestilence, which swept off so many victims, from almost every other institution in our city.

*M—A—F—*, the 5th case, was aged 15 years, and was received into the House, May 28, 1832. She was seized with Intermittent fever, July 21, 1834, which in a few days assumed the Remittent form, accompanied with severe pneumonic symptoms. These yielded to bleeding from the arm, cupping, and blistering, and she continued to improve until the 25th inst. when she manifested decided cerebral symptoms, attended with great excitement. Her head was shaved, and cups freely applied, followed by cold applications, and active purgation, but without much relief. The cups were re-applied to the temples and neck, followed by ice to the scalp; Calomel purges, and other remedies with apparent relief; but this was temporary: and soon after, there was a renewal of the cerebral symptoms, which required a renewed application of the means just enumerated, with the addition of the free use of Calomel internally, as well as external frictions to various surfaces of her body, with the hope of bringing her under the Mercurial influence; but in this we failed, and her case progressed to a fatal termination on the 16th of August, 1834, in spite of active treatment, and faithful nursing. The examination after death, exhibited great disease of that portion of the brain, called Cerebellum, it being much softened in its texture; at the base of the brain, near the Medulla Oblongata, 4 to 6 ounces of effused fluid were found,—the consequence of the previous inflammation in that part. She received 26 visits, and was ill 16 days.

*C—R—*, aged 13 years, was the 6th fatal case, and committed on the 9th of September, 1834. She was a poor, miserable, sickly, broken down child, snatched from the very lowest haunts of infamy and vice, in Shippen street, and removed to the House of Refuge, as it appeared, soon to die. She appeared exceedingly dull and stupid, and had been liable, from her own account, to fits, but did not experience any attack from the time she came in, until the 7th of October, when she was affected in the presence of the attending Physician, with an epileptic convulsion; she survived it but for a few days, and then sank beneath its influence, on the 10th inst. The Physician satisfied perfectly, as to the nature of her disease, and the body becoming very soon offensive, did not see proper to make a post mortem examination.

*M—A—D—*, aged 12 years, was the last and 7th fatal case. She was committed to the Refuge, November 10th, 1834, in a very precarious state of health, apparently labouring under confirmed Tubercular Consumption. She was placed in the Infirmary, and put under medical care, November 17th, but without benefit, and rapidly declined, and expired December 28, 1834. The body was examined, and the following morbid appearances were found, viz:—various Tubercular

Abscesses in the right lobe of the left lung; adhesion of the Pericardium of the Heart; the outside of the Pericardium, presenting tubercles, communicating with the substance of the left ventricle; mucous surface of stomach, and small intestines inflamed and thickened; large intestines ulcerated, and Liver enlarged.

It therefore appears, from an analysis of these cases, that they present nothing in their nature or history, that can be ascribed, as peculiar to the House of Refuge; neither can they be traced to any cause, by which, it would be made manifest, that their confinement in this institution, or its discipline could have had in any possible way, a peculiar agency, directly, or indirectly, in producing them, distinct from the universal liability to disease which prevails at all times, and under all circumstances. On the contrary, we know of no similar Institution, in which, there is a greater degree of parental kindness exercised, and uniform attention paid, to the various complaints, and wants of its inmates; and we should be doing injustice to our own feelings, if we neglected, on the present occasion, to express our thanks to the Executive Board, and to those who have the more immediate charge of the House, for the uniform readiness which has been exhibited, to carry into effect, all suggestions heretofore made by us, for the promotion of the health, comfort, and convenience of those, over whom, we have been called, to exercise a professional care.

J. MARSHALL PAUL,  
WILSON JEWELL,  
THOMAS F. ASH,  
E. F. RIVINUS.

From the N. Y. Courier and Enquirer.

#### IMPORTANT TO TRAVELLERS.

SUPERIOR COURT, }  
April 20. }

Before Judge HOFFMAN.

Ralzamon Belknap, vs. The Camden Rail Road Transportation Company.

In the month of August, 1833, the plaintiff proceeded with his baggage to the office of the defendants, and being too late to depart by the steamboat that day, he left his trunks in the charge of Mr. Bliven, a clerk in the office, requesting him to lock them up. This the clerk promised to do. The plaintiff called again in the evening, and found the baggage missing; and it has not since been recovered. The present action was to recover its value.

The points of defence were, first, that a printed notice was exhibited in the office, stating that all baggage was transported thence at the risk of the owners; secondly, that the clerk had no right to make a special contract for its security; and thirdly, that no consideration had been paid for the responsibility, if any, which was incurred.

It was contended, in reply to this, that the notice in the office was voluntarily withdrawn by this special undertaking; that the clerk being an acting agent for the defendants, they were responsible for his acts; and that the consideration for this special contract, was the fare which the plaintiff would have paid for the transportation of his family and their baggage, had not the latter been lost.

The Judge charged that if the jury believed Mr. Bliven to have been the agent of the defendants when he made the promise to the plaintiff, the latter was entitled to their verdict. The jury retired for a few minutes, and returned a verdict for the plaintiff in \$300.

## METEOROLOGICAL REGISTER.

*Extract from the Meteorological Register, taken at the State Capital—Harrisburg, Pennsylvania.*

By JAMES WRIGHT, Librarian.

SEPTEMBER, 1834.

Day of the month.	Thermometer.				Barometer.				Winds.	State of the Weather.
Day of the week.	Sun rise.	1 o'clock, P. M.	Sun set.	Mean.	Height at sun rise.	Height at 1 o'clock, P. M.	Height at sun set.	Mean height.		
1 Monday,	65	68	67	67	29.80	80	80	29.80	E	Rainy day.
2 Tuesday,	65	74	70	70	88	93	99	93	E	Cloudy damp day.
3 Wednesday,	69	75	77	74	30.00	00	00	30.00	SE	do. do.
4 Thursday,	74	82	80	79	29.96	86	80	87	E	Cloudy day.
5 Friday,	74	77	78	76	68	60	60	63	E	Heavy show. clo. rai. at nig.
6 Saturday,	72	78	77	76	62	73	73	69	NW	Clear day.
7 Sunday,	70	76	73	73	79	79	79	79	N	Cloudy—rain.
8 Monday,	65	73	74	71	85	82	70	79	N	Cloudy damp day.
9 Tuesday,	72	76	74	74	60	60	60	60	W	Rain—clear.
10 Wednesday,	60	65	62	62	60	60	60	60	W	Clear day
11 Thursday,	54	60	59	58	77	80	93	84	W	Sun & Clouds.
12 Friday,	49	64	62	58	30.10	18	18	30.15	W	do. do.
13 Saturday,	52	65	65	61	20	22	22	21	SE	Rain—sun.
14 Sunday,	52	66	65	61	22	22	22	22	SE	Cloudy day
15 Monday,	50	68	68	62	19	19	10	16	S	Clear day
16 Tuesday,	49	69	68	62	10	5	30.00	05	S	do. do.
17 Wednesday,	58	69	65	64	30.00	29.94	80	29.91	SE	Cloudy—rain.
18 Thursday,	68	74	74	72	29.72	72	72	72	SE	Cloudy damp day.
19 Friday,	67	73	70	70	72	78	78	76	W	Cloudy—clear.
20 Saturday,	58	72	69	66	81	85	85	84	W	Clear day.
21 Sunday,	53	65	70	63	77	74	71	74	SE	Fog—rain—clear.
22 Monday,	57	68	67	64	71	80	80	77	SE	Clear day.
23 Tuesday,	60	72	74	69	72	71	68	70	W	Cloudy—clear.
24 Wednesday,	56	64	63	61	80	86	86	84	S	Cloudy damp day.
25 Thursday,	51	70	68	63	86	93	94	91	NW	Fog—clear.
26 Friday,	53	72	69	65	98	30.00	30.03	30.00	NW	Clear day.
27 Saturday,	58	75	73	68	29.88	86	86	87	SE	Clear—cloudy.
28 Sunday,	58	55	53	55	94	94	94	94	SE	Cloudy—rain.
29 Monday,	47	60	67	55	98	98	30.00	99	W	Frost—clear.
30 Tuesday,	40	55	67	55	30.06	12	10	30.09	W	Frost—clear—cloudy.

## Thermometer.

Maximum on the 4th,	79°
Minimum on the 28th,	55
Difference,	24
Mean,	66

## Barometer.

Maximum on the 14th,	30.22 inches.
Minimum on the 9th,	29.60 "
Difference,	00.62 "
Mean,	29.88 "

## EASTERN PENITENTIARY.

*Continued from page 267.*

LETTER OF DR. LIEBER.

PHILADELPHIA, Jan. 22, 1835.

Dear Sir,

In compliance with your request, that I should reduce to writing several views on our penitentiary system, which I had stated in conversation, I intend briefly to give my opinion upon some prominent points relating to this important subject. I am obliged to write in a hurry, and I trust you will excuse all deficiencies in the *externals* of the following remarks.

My views respecting the great and essential advantages of the Pennsylvania penitentiary system over the Auburn system, and its moral operation have been fully stated in the introduction and appendix to my translation of the work on the penitentiary system in the

United States by Messrs. De Beaumont and De Tocqueville. I have had no reason to change my opinion, as given there; on the contrary, each farther observation and continued inquiry into the practical operation of our system, have confirmed my views, and more strongly convinced me of its excellence. I may therefore be permitted to refer you to that work; I am unable to express my views better than I have done in that book.

1. The principle of the Pennsylvania system is *solitude with labor*. Solitude is as necessary as labor; labor as indispensable as solitude. Solitude is necessary for five reasons.

1. It prevents contamination, and affords an assurance that the convict, at any rate, does not leave the prison worse and more hardened than when he entered.

2. It forces, more than any other means, to reflect. Solitude is a most powerful moral medicine; and yet

powerful without being cruel. Most criminals have become such from thoughtlessness: make them reflective, and you have gained a very great point.

3. It prevents the convict from being known by his fellow prisoners, and thus gives him a far greater chance of living honestly after the expiration of his imprisonment than any other system.

4. It affords a kind of punishment which, though of a stern character, as it ought to be, avoids all excitement in the criminal, and does not irritate anew him who considers himself already at war with society. Instead of generating in him additional hatred, it forms rather a transition from a life of crime and vice to that of sobriety and honesty. In short, it is no *infliction* of punishment, but rather a *privation* of comforts.

5. It does not deaden the moral feelings of the convict still more, either by his finding himself in a degraded company, or by the infliction of corporal punishment, without which our system *can* do.

11. Labor is necessary, with regard to the convict, for three reasons:—

1. It calms the mind of a convict—it assuages. The wonderful effect of labor and activity, so great with all men, is not less so with a convict. The testimony of a French prison keeper, given in my introduction, mentioned above, is very interesting and correct.

2. It makes solitary confinement physically and morally possible. Without it, solitude is cruelty, and would lead to *brooding* instead of *reflecting*; would drive the convict to a bitter feeling of revenge, not to reconciliation with society.

3. It gives to the convict the means of living honestly after liberty has been restored to him, and prevents him in many cases from recommencing that life which is so injurious to society.

III. Without labor, it would be impossible for a convict to give any degree of steadiness to his thoughts; imagination would invariably overpower reflection, and a wild state of the mind, whether consisting in actual insanity, medically so called, or not, must be the natural and unavoidable consequence, according to the organization of the human mind. Man was not made to be without labor, especially not in solitude. Vice and vicious desires are the necessary consequence of idleness, and particularly of *absolute* idleness with a convict. Even those who have no practical knowledge of criminals, can easily imagine to what state of mind, and how great a demoralization with most convicts, absolute solitude without labor must lead. What shall a convict do? Read? He who has not been imprisoned, does not know how difficult it is, even for a cultivated mind, to read the whole day: how much more difficult, then, must it not be with convicts, who generally belong to the least educated classes? I repeat it, labor is, both in a moral and physical view, (not to speak of the economical,) as necessary as solitude; and the latter without the former, (except by way of additional punishment for trespasses *within* the prison walls,) would be both cruelty and the most injudicious plan, because it would return the convict upon society as an incensed felon, panting for revenge.

IV. A great excitement exists at present in various parts of our Union, against labor in the prisons. I do not consider this the place to investigate the matter thoroughly; I only will state that all arguments which have as yet been brought forward against it, seem to be futile, that more or less labor has always existed in prisons, and that a penitentiary system without labor is a contradiction in itself. I allow that care ought to be taken that the prisons, or in other words, the State does not sell the goods manufactured in the penitentiaries for less than a fair market price. In discussions of this kind the immense *expense* which a criminal causes to the community is hardly ever taken into consideration. Not only that the courts, police, &c., must be paid for him, but the actual loss of property caused by all crimes against property is incalculable; and we ought not to

allow ourselves to be guided by minor interests, when the question is whether an individual shall return to society with the means of providing for an honest life, or as the old obnoxious *being of prey*. The consideration lately stated by a gentleman in very high authority, that, perhaps it is wrong to make of the convicts mechanics, and thus to send them all on their leaving the penitentiary, to one class, and thereby to endanger the morals of this class, seems to me unfounded. First, what class do the mechanics form? I do not know the mechanics as a separate class; they are citizens as the farmers are, and have morally no interest of their own. Is it desirable that a criminal should, if possible, change his life, or not? If not, then let us abandon all punishment; if however it is desirable that the convict should reform, then let us give the means of being honest to him, to whom they have been denied but too often, not by his own guilt. But wherever the released convict may turn, the same objection can be made; if we do not teach him a trade, he must become porter, day laborer, work on a farm, &c., should he, which is not probable, resolve to live honestly without having learned some trade. It is, therefore, in my opinion not wise when some writers have praised this excitement, as showing a lively moral sensibility in the Mechanics, who do not wish to see their trade degraded, by the instruction of criminals in it. As if honesty itself were degraded, because the convicts are taught to be honest; or is the Bible of the honest part of the community insulted, because the same Bible is given into the hands of convicts? The convicts breathe, eat, sleep; are all these actions henceforth degraded?

V. Since solitude is so essential a feature in our penitentiary system, it would be well perhaps to define more clearly what "solitary confinement at labor, in a cell or work-yard" is meant to be. Is a convict who works as baker alone at his oven, within the prison walls, in solitary confinement or not? As a general rule solitude within the cell and yard, ought certainly to be as little as possible interrupted. But economical considerations may sometimes be very powerful; and it might be permitted in such cases, to put one or two convicts to work out of their cells, yet they never ought to see each other, nor ought they to be placed together with other people, or where they can be seen by any one except the prison officers. I would always advise to keep solitude uninterrupted as much as possible.

VI. The whip is unknown in our penitentiary; it would little accord with our system which strives to avoid every degrading punishment, as well as every exciting one. How then is obedience to be exacted? for no penitentiary system can exist without the power of exacting obedience, as also the reform of a convict must begin with obedience to the laws. In the Auburn system, the whip is the final means of exacting instant obedience. Our system does not acknowledge it; what other adequate means have we? I know of none which is so just and humane as privation of food until the convict has complied with what is expected from him. He has it in his power instantly to remove the pain, and nothing but what the mildest laws command is expected from him. In these cases it ought to be clearly understood that the removal of the pain cannot be effected by any other means but by compliance with the rules. "It is the first of all things," said an experienced superintendent of a penitentiary in the State of New York to me, "to impress the mind of the convict with the conviction that he must obey the rules." It cannot be objected that in cases of extreme obstinacy, when privation of food for a certain time has had no effect, another means should be tried, because I speak of extreme cases only when no other means have effect.

VII. To give an instance. Labor is almost universally liked by the convicts in solitary confinement, so much so, that nothing is more common than their asking

and begging for light, when the days begin to be short, and lamps are not yet given to the prisoners, in order to work by candle light. But sometimes it will happen that convicts refuse to labor, and cannot be brought to do it by protracted solitude without labor, who would prefer indolence, however long it might last. If in such a case a piece of work is given to the refractory convict, which it is known he possesses the ability to perform, and on condition that no food will be given to him until the task is performed, I can see no objection against the measure. If other means equally effective and mild can be proposed, let them be examined, but let it distinctly be understood, that compliance with the laws will and must be exacted. I believe there is no danger that a convict would carry his obstinacy to an extent, which would become really dangerous to him.

VIII. There are others willing to work, but not as much as can be fairly expected from the most moderate ability, or as much as they have previously performed; short allowance seems in such cases a judicious means; all convicts like their meals, particularly those in solitary confinement.

That part of the act, which authorizes the inspectors "to make such rules for the internal government of said prison, &c.," ought to be amended, and the inspectors ought to be enjoined to define the disciplinary means, by which the warden may punish infringements of the rules and regulations, such as disturbance of silence, insolence, improper language, &c.

IX. It sometimes happens that a convict will disturb the harmony of the prison, to use a phrase borrowed from sea language. Silence is necessary in any penitentiary system, and though the convicts cannot converse with each other from cell to cell, a violent noise would be heard. The refractory convict, therefore, ought to be removed to a dark and distant cell; but as he would disturb the necessary silence of the penitentiary, and excite the curiosity of his fellow convicts, while being led along the corridors, it would perhaps be well to use a gag for the short time that he passes the cells of others; this would not last longer than two or three minutes; it ought always to be done so that the convict cannot see any thing while he is led along, in the same way as when he is first led to his cell; he may then be left to himself in the dark cell, until he becomes silent.

X. The appointment of the inspectors is an important subject; the general principles to be followed with regard to it seem to me:

1. That their appointment be as far removed from political vacillations as possible, and proceed from as stable an authority as it can be conveniently done. A penitentiary has nothing whatever to do with parties; whoever may be in or out, the laws according to which the criminal has been sentenced, and which stamps a crime as such, remain immutable, while on the other hand no possible good can be expected from a penitentiary system which is subject to continual changes; for, though the system rests on general and firm principles, its being put into practice depends nevertheless considerably upon the individuality of the warden. The moral and religious effect, expected from the system, depends in a great degree upon a treatment of the prisoners which can be only gradually developed, and requires time; moreover, there is not all the good, which our system can effect, to be expected, if the warden is not animated by that philanthropic zeal which prompts him to act and assist the prisoners beyond the prescribed duty; which makes him consider the convicts as unfortunate men placed for a time under his charge. Whatever rules the Legislature may prescribe, that zeal cannot be reduced to rules nor be included under any prescribed responsibility of the warden. But what man, animated by such a noble and rare zeal would be willing to be appointed as warden, had he no expecta-

tion that he would be left in his place as long as he fulfils faithfully all his duties? Rotation is practicable and may be beneficial in various branches; it is against the nature of the subject itself, wherever a moral plan of education, training, &c., is to be pursued. If rotation of teachers in schools would inevitably bring their ruin, it would still more counteract all the beneficial results expected from the penitentiary system. We ought never to forget that we necessarily defeat the end of any institution by subjecting it to influence entirely foreign to it. On the other hand, a politician would be a poor warden of a penitentiary; more than even a minister he ought to consider himself a servant of mankind for whom no parties exist. I should therefore consider the appointment of inspectors by the Legislature as nugatory; I think the Judges of the Supreme Court proper persons for this purpose.

2. That it is of the greatest importance that persons should be appointed as inspectors who are acquainted with prison discipline or for so long a time, that this knowledge may be obtained, and the fruits of it may yet be reaped during the term of the same inspectors. Prison discipline is not like a number of other subjects, easily understood by a clear minded individual and according to sound, general principles which guide us in other respects. Criminals form a community of men, in some respects much more like the honest portion of society, than most people suppose, in others much more different from any other community than is generally believed. A criminal is an inconsistent being, uniting the thoughtlessness of a child with the dissimulation of vice, folly and simplicity with cunning and experienced artfulness. The period for which an inspector is appointed, therefore, ought not to be too short.

3. That there be not too great a number of inspectors. The nature of a penitentiary requires that the board of inspectors must not become a *debating assembly*, but ought to be an *acting board*. Its energy must not be weakened. The present number of inspectors strikes me as sufficient.

XI. Official visitors are necessary. Those whom the law appoints, (act of April 23, 1829, art. VII.) ought to be official visitors, but public opinion calls, perhaps, for official visitors of another kind; so that the public have an assurance, that the system established by law is faithfully executed. To find out a way of appointing a body of men for this purpose, is more difficult than would appear at first glance; for, send a man who does not know any thing about a penitentiary system, into a penitentiary to inquire into its management, what will he do? He goes to the convicts, and asks them how they are treated, whether they have to complain of anything, &c.—a mode of proceeding by which very little is gained. The convicts often will lie; often, perhaps unwillingly, exaggerate; make themselves the objects of pity; sometimes they will praise the keepers in the hope of gaining something by it, &c. In short, if the testimony of the criminal is worth any thing, that of the warden, a *virtus* man, is worth at least as much. I do not mean to say the convicts ought never to be heard, but the law provides already most humanely for this point, and enjoins the inspectors to visit the cell without the warden, and to question the convicts.

On the other hand, it is very important that silence and solitude be disturbed as little as possible; and weighing the demands of all parties, I would propose, perhaps, that the grand jury elect from among themselves a body of three, to be a *grand jury* for the purpose of inquiring into the penitentiary affairs. A small number, moreover, would be much more able to examine with any kind of accuracy than a body of twelve or twenty men.

XII. The law (art. VII. of the act of April 23, 1829) gives the sole right of appointing the under keepers to the warden, and the power of discharging them, to the warden and the board of Inspectors concurrently.

An establishment, the success of which depends so much upon the faithful and zealous performance of a number of duties which cannot be defined nor even demanded by law, and upon the unanimous co-operation of all the official, as well as the ready assistance of the under-keepers, requires also, in my opinion, that the warden should be the sole person who should select his assistants, because, in a penitentiary, this choice ought to be made partially according to the individuality of the warden.

A & B may be two equally virtuous, intelligent, industrious and kind-hearted men, and yet, A may be unfit to be under-keeper under a certain warden, while B may be the very individual who ought to be selected. If you entrust to a warden several hundred beings, you may easily entrust him with the power of appointing his under-keepers; yet, it might be fair that he should exercise this power with the consent of the inspectors; but on no condition whatever, ought the inspectors to have the power of forcing an under-keeper upon him. The power of discharge ought, perhaps, to remain as now defined by law. The warden has to live with his overseers, as in a family, and it would be of little advantage, were he forced to retain an overseer though their individualities do not suit each other.

XIII. The law ought not to demand duties which it is a bare impossibility to perform. Thus, the act of April 23, 1829, art. 1, demands that the warden shall "see every prisoner under his care, at least once in every day," and the act of March 28, 1831, sect. 1, orders four hundred more cells to be built. The penitentiary will contain, then, about six hundred cells.—Now suppose that two minutes is the average time of the warden's visits. Sometimes more would not be requisite than looking into the cell and seeing that it is kept clean; but at others, the visits must extend to four, six, and ten minutes, if they shall be of any use. Six hundred visits of two minutes each, would require twelve hundred minutes, or twenty hours! or take the average time but one minute, which is certainly the shortest, it would require ten hours, alone for these visits.

XIV. It has always appeared to me, that the Pennsylvania penitentiary system, to be perfect, would require a *school master*, appointed to teach the convicts reading and give them moral lessons, under the direction of the warden and the superintendence of the inspectors. He ought to be required by law, to keep a journal of what he has daily done, the progress of the convicts, and of any uncommon occurrence.

XV. Books are indispensable for a penitentiary system on our plan: they are now collected by donations; the law might do something for this important point.

All my experience has shown me, that it is not advisable to give the whole Bible into the hands of convicts. The Bible contains a number of passages which the perverted mind of a convict turns to bad account; he will often delight in examples held up in the Old Testament for abhorrence, as being congenial to him. I speak here from facts which have come to my own knowledge. It would be highly desirable if there could be made for the prisoners:

1. Extracts of the Bible.

2. A catechism of civil duties, laws and government.

A history of the United States, drawn up for schools, would always form an excellent work for convicts, together with some popular works on natural history.—The latter are much liked by the convicts, and they give wholesome food to the mind.

I cannot dismiss the subject, without drawing your attention to the pardoning power as now used, though the subject does not fall, perhaps, within the immediate circle of your inquiry. I have given my views on his alarming evil, in my introduction to the mentioned work, on page 29 and seque. Let me add—for it is important to me to bring high authority in support of

my remarks—that one of the most experienced wardens of a large penitentiary, declared to me, that he had carefully read my observations on the pardoning power, and that he fully agreed with every word, both as to the effect of pardoning in general, and on the convict in the prison in particular. On February 6, 1818, an ordinance was issued in France, according to which, good behaviour entitles a convict to a pardon, by shortening the time of imprisonment. It was Mr. de la Ville de Mirmont, Inspector General of prisons, who induced the keeper of the seals to cause this law to be passed. In a work containing observations on the work of Messrs. de Beaumont and de Tocqueville, (Paris, 1833,) Mr. de Mirmont, after having made a number of sound reflections on subjects of pardon, says:—"It was I who persuaded the minister to cause this ordinance of 1818, and often have I since regretted it." A strange kind of compassion shows itself often with those who judge of this matter by more momentary impressions; it leans all on one side—toward the criminal; and compassion with the community, upon whom an unpunished and unreformed criminal is returned, is altogether forgotten. Yet it is but a poor compassion even with the convict. It is hardening him in vice and crime still more. I have no doubt whatever, that the frequent and irregular applications of pardoning, have essentially lessened the moral awe which was formerly, and always ought to be attached to the idea of crime, and are one of the causes of the deplorable frequency of crimes of an atrocious character in our country. Could nothing be done to regulate somewhat the pardoning power?

These are briefly my views on some important points belonging to penitentiary discipline and management, upon which we touched when I had the pleasure of seeing you.

I am with great respect,

Dear Sir,

Your obedient servant,  
FRANCIS LIEBER.

To the honorable CHARLES B. PENROSE,  
Chairman of the Committee of inquiry into  
the affairs of the Eastern Penitentiary.

—  
PHILADELPHIA, JANUARY 28, 1835.

My Dear Sir,—Permit me to send you a few additional remarks to what I had the pleasure of stating to you in my last.

I. I forgot to mention a fact very important in regard to the number of inspectors. Formerly, there were five inspectors in the New York State prison, and it was found necessary to reduce even this number to three. You see that our five inspectors are not too small a number.

II. I ought to have said, that a law might be passed that the grand jury of *Oyer and Terminer*, should elect a committee of three to visit the penitentiary. The law of 1829, permitted the grand juries of the courts of the city and county to visit the penitentiary. There are in one year, four Quarter Sessions, four Mayor's Courts, and one *Oyer and Terminer* held.

Each grand jury is composed of twenty-three individuals, so that the nine grand juries of one year are composed of two hundred and seven persons. The average term of imprisonment is three years; hence each prisoner was allowed to be visited by six hundred and twenty-one persons by way of grand jury visits, during his term! You see how just it was to abolish a law which so directly counteracted a system, the basis of which is solitude.

III. If you read my translation of the work of Messrs. Beaumont and Tocqueville, you will find the monstrous abuse of the pardoning power shown by statistical tables, how utterly every true effort of penal justice and legislation is defeated by *pardons*. You find these ta-

bles, calculations, &c. respecting pardon, on page 233, and seque. By farther inquiry, I have found that those who possess this privilege of pardoning, would wish for nothing more than a limitation of it, could this be effected without a change of the constitution. It is a painful prerogative, which as long as it exists constitutionally, cannot be but misapplied in many cases. It is impossible that an individual so accessible to every citizen as a Governor of one of our states, can withstand the continued and pressing applications for pardons. The interest of the Governors therefore, as well as that of the community, calls for a regulation of this arbitrary, obnoxious and ruinous prerogative, for if pardons continue to be so frequently and arbitrarily applied, if criminals continue to be restored to the level of honest citizens, by a mere arbitrary act, if in future, convicts, who have not suffered the whole punishment which the law awards, shall have a great advantage over those convicts who have suffered the whole penalty, and be restored to their honor, which the latter are not, as is now the case, the moral sense of the community must severely suffer, because arbitrary measures take the place of those which the community ought to consider as the necessary and infallible consequence of crime. There is no doubt but that the general moral sense of a community must suffer, if a murderer is restored to all rights and privileges after a few years imprisonment, and if even his deed was not capable of arresting the arbitrary or casual deciding of the gravest question—whether a man shall continue to be imprisoned or not.

There is one way, it seems to me, which might be attended with great use, though, I willingly admit that it is by no means all I should like to see done. But it is perhaps that which for the present can be done. *Pass a law which obliges the Governor to advertise, in the county where a man has been convicted, that he intends to pardon such a person, six weeks before he can grant the pardon.* At present the law is extremely unjust. A man is convicted; the community has to pay for his trial, imprisonment, &c., and has suffered by his crimes. He is imprisoned. During his trial the community was represented, but as soon as he is imprisoned all is darkness; some person is bribed, he gets signatures for a petition for pardon—Often, very often given, merely to get rid of pestering applications; the signatures are carried to the Governor, and he again often grants the pardon to get rid of never ceasing applications, and the first thing the community—highly interested in the case—knows, is that a felon has been returned to them. Many criminals indeed, and particularly some of the worst would never be pardoned, were the Governor obliged to make known, in a suitable way, his intention of pardoning a person, six weeks before it is to take place; the poor and rich would stand much more on a par, while now the convict with respectable and wealthy relations stands a much better chance, than the poor or homeless convict, and, generally speaking, the former deserves far less his pardon than the latter. The pardoning privilege as now used, is one of the most unjust things in existence, from whatever side you may view it, and at the same time so entirely opposed to all our political and social principles, so heterogenous to our whole system, that it is surprising how it can continue. You would deserve the warmest thanks of the community if you were to bring this matter before the legislature; a law as I have proposed would soon be imitated by other states, and a new period for penal justice would begin in our country. This law demands nothing than bare justice, and indeed, not even all that bare justice can demand.

Your obedient servant,

FRANCIS LIEBER.

To the Honorable CHARLES B. PENNOSE,  
Of the Senate of Pennsylvania,  
Harrisburg.

## APPRENTICES' LIBRARY COMPANY.

Annual Report of The Managers of the Apprentices' Library Company of Philadelphia.—Read at a meeting of the Company, held at their Rooms, on the 9th of March, 1835, and published by their order.

### To the Apprentices' Library Company.

The Board of Managers respectfully report:

That the Institution has continued during the past year, to realise the expectations, and promote the important objects of its founders, six hundred and thirty-five new applicants having been admitted to participate in its benefits, and the general good deportment of the boys, confirming the belief, that the use of the Library has a salutary influence in forming orderly and industrious habits. The number of boys now receiving books is 904, and an average of 844 have resorted hither for instruction throughout the year. One hundred and sixty-six volumes have been added to the Library since last report; of these 30 were selected from donations, and 136 purchased; and 290 volumes have been re-bound. Our collection now consists of about 9000 volumes, and presents all the facilities for the acquisition of useful and ornamental knowledge, which are usually afforded in well regulated libraries. The additions to our list of members have not been so numerous, as in many previous years, only 32 persons having been elected since the last annual meeting.—The Treasurer's account, herewith presented, exhibits the financial transactions of the year, and the present fiscal condition of the Company. To this department of the Institution we earnestly invite the attention of the Contributors, assuring them that a strong personal co-operation, on their part, is necessary, to preserve the Library in the high rank which it has acquired by years of ardent devotion to the cause of education.—

The embarrassing difficulties in the affairs of the Chesapeake and Delaware Canal Company have deprived us of a large portion of our regular income, and although the investment in their loans is considered safe, the deficiency which has thus been made in our resources, must be met either by sacrificing a portion of the permanent fund of the Institution, or by reviving a wholesome interest in its affairs in the hearts of our citizens. Fifteen years of active usefulness, and ten thousand individuals who have here had the great book of knowledge thrown open for their perusal, assert its claims for healthy, vigorous and enduring life; and the Board of Managers have the fullest confidence, that those claims, properly enforced by the Contributors, will be met by our community with liberality and promptitude. It is due to that important class of the community, for whose special benefit the Apprentices' Library was founded, that the means for giving instruction, commensurate with the claims of society, and of our free and equal institutions, should be not only sufficient but ample, presenting to its pupils the literary treasures of the present as well as the past age. In its volumes may be found the corrective teachings of parental love for those who are comparatively friendless, and a salutary antidote for the seductive and dangerous approaches of sensual pleasure. Here the faculties of the mind may be extensively cultivated; the examples of history be made available, for the active performance of all the duties of private and public life; the vast discoveries in science, and the arts seized upon for new triumphs in the physical world, and man be fitted for the important ends of his creation. Charged by you with the prosecution of the designs of such an institution, and about to surrender our delegated trust, we have felt it incumbent upon us to endeavour to awaken the public mind from the lethargy into which it has fallen in regard to our Association. To a vast proportion of the pupils of our public schools, the benefits of elementary education would be lost, without the sustaining agency of well-conducted libraries and reading rooms, easily accessible to apprentices and other

young persons. Since the foundation of the Apprentices' Library, several other valuable institutions, labouring with us in the good cause, have been established, and are now well conducted and prosperous.— Giving them the full meed of praise, for their honorable efforts, and cheering them onward, we invite a share of the public favour to their pioneer and most valuable auxiliary, assured that it is only necessary to direct that munificent liberality for which this city is proverbial, towards our Institution, to secure its continuance on an enlarged and enduring capacity for usefulness.

By direction and on behalf of the Board of Managers.

HENRY TROTH, Chairman.

FREDERICK FRALEY, Sec'y.  
Philadelphia, March 9, 1855.

*"The Apprentices' Library Company of Philadelphia,"*  
*in account with Samuel Sellers, Treasurer. From*  
*March 10th, 1854, to March 9th, 1855.*

Dr.

To Balance,	\$ 89 43
To Cash paid sundry orders of Board of Managers:—	
For Rent of Library Room,	125 00
Salaries of Librarians,	291 00
Binding Books,	41 58
Room Committee, Sundries, including Shelving, &c.	84 13
Book Committee,	236 24
Distributing Notices and Report,	13 20
Printing,	18 88
Insurance and Stationary,	33 02
Oil for Lamps,	23 75
To Balance due to Company carried down,	73 04
	\$1,029 27

Cr.

By Cash from Members, deducting Commissions,	\$544 10
Donation from M. C. Ralston, Executor of James Hemphill, being part of the fund at the disposal of Executor,	100
from sundry donations,	62
	162 00
of Librarian for Catalogues and Fines,	88 44
of Managers for fines for non-attendance,	12 13
Dividends of Farmers & Mechanics Bank,	4 00
Dividends of Bank North America,	24 00
One year's Ground Rent,	75 00
of Room Committee, Rent of Room, &c.	49 60
Sale one share Farmer's and Mechanics Bank Stock,	70 00
	\$1,039 27

By Balance, brought down, \$73 04

SAMUEL SELLERS, Treasurer.  
Philadelphia, March 9, 1855.

The subscribers have examined the above account of the Treasurer, compared it with the vouchers, and found it correct. Balance due the Company as above, seventy-three dollars and four cents.

HENRY TROTH.  
FRED. FRALEY.

The Library is open on Mondays, Wednesdays, and Fridays, from the 1st of March to 1st of September,

from half past six to half past nine, P. M., and from 1st of September to 1st March, from six to nine, P. M., and on every Saturday, from four to half past nine, P. M.

From the Pennsylvania Reporter.

House of Representatives.

# GENERAL EDUCATION—REMARKS OF MR. STEVENS.

Mr. Speaker,—I will briefly give you the reasons why I shall oppose the repeal of the school law. This law was passed at the last session of the legislature with unexampled unanimity, but one member of this house voting against it. It has not yet come into operation, and none of its effects have been tested by experience in Pennsylvania. The passage of such a law is enjoined by the constitution; and has been recommended by every governor since its adoption. Much to his credit, it has been warmly urged by the present executive in all his annual messages delivered at the opening of the legislature. To repeal it now, before its practical effects have been discovered, would argue that it contained some glaring and pernicious defect; and that the last legislature acted under some strong and fatal delusion, which blinded every man of them, to the interests of the commonwealth. I will attempt to show that the law is salutary, useful and important; and that consequently, the last legislature acted wisely in passing, and the present would act unwisely in repealing it.— That instead of being oppressive to the people, it will lighten their burthens, while it elevates them in the scale of human intellect.

It would seem to be humiliating to be under the necessity, in the nineteenth century, of entering into a formal argument to prove the utility, and to free governments, the absolute necessity of education. More than two thousand years ago the Deity who presided over intellectual endowments, ranked highest for dignity, chastity and virtue, among the goddeses worshipped by cultivated pagans. And I will not insult this House or our constituents by supposing any course of reasoning necessary to convince them of its high importance. Such necessity would be degrading to a Christian age and a free republic!

If then, education be of admitted importance to the people under all forms of governments; and of unquestioned necessity when they govern themselves, it follows, of course, that its cultivation and diffusion is a matter of public concern; and a duty which every government owes to its people. In accordance with this principle, the ancient republics, who were most renowned for their wisdom and success, considered every child born subject to their control, as the property of the state, so far as its education was concerned; and during the proper period of instruction, they were withdrawn from the control of their parents, and placed under the guardianship of the commonwealth. There all were instructed at the same school; all were placed on perfect equality, the rich and the poor man's sons, for all were deemed children of the same common parent—of the commonwealth. Indeed, where all have the means of knowledge placed within their reach, and meet at common schools on equal terms, the forms of government seem of less importance to the happiness of the people than is generally supposed; or rather, such a people are seldom in danger of having their rights invaded by their rulers. They would not long be invaded with impunity. Prussia, whose form of government is absolute monarchy exten is the blessing of free schools into every corner of the kingdom,—to the lowest and poorest of the people. With a population equal to our whole Union, she has not more than 20,000 children who do not enjoy its advantages. And the consequence is, that Prussia, although governed by an absolute mon-

arch, enjoys more happiness and the rights of the people are better respected than in any other government in Europe.

If an elective republic is to endure for any great length of time, every elector must have sufficient information, not only to accumulate wealth, and take care of his pecuniary concerns, but to direct wisely the legislatures, the ambassadors, and the executive of the nation—for some part of all these things, some agency in approving or disapproving of them, falls to every freeman. If then, the permanency of our government depends upon such knowledge, it is the duty of government to see that the means of information be diffused to every citizen. This is a sufficient answer to those who deem education a private and not a public duty—who argue that they are willing to educate their own children, but not their *neighbor's* children.

But while but few are found ignorant and shameless enough to deny the advantages of general education, many are alarmed at its supposed burdensome operation. A little judicious reflection, or a single year's experience, would show that education, under the free school system will cost more than one-half less, and afford better and more permanent instruction than the present disgraceful plan pursued by Pennsylvania.—Take a township of six miles square and make the estimate—such townships, on an average, will contain about 200 children to be schooled. The present rate of tuition generally (in the country) is two dollars per quarter. If the children attend school two quarters each year, such township would pay \$800 per annum. Take the free school system—lay the township off into districts three miles square; the farthest scholars would then have one mile and a half to go, which would not be too far. It would require four schools. These will be taught I presume, as in other states, three months in the winter by male, and three months in the summer by female teachers; good male teachers can be had at from sixteen to eighteen dollars per month and board themselves; females at nine dollars per month—Take the highest price, eighteen dollars for three months, would be

\$34 00

And then for females at \$9 for three months,

27 00

Each school would cost

81 00

Four to a township

4

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 324 00

The price now paid for the same is

800 00

Saving for each township of six miles square, \$476 00 per annum.

If the instruction of 200 scholars will save by the free school law \$476, the 500,000 children in Pennsylvania will save 1,190,000! Very few men are aware of the immense amount of money which the present expensive and partial mode of education costs the people. Pennsylvania has half a million of children, who either do, or ought to go to school six months in the year. If they *do* go, at two dollars per quarter, their schooling costs two millions of dollars per annum! If they *do not* go when they are able, their parents deserve to be held in disgrace. Where they are unable, if the state does not furnish the means, she is criminally negligent. But by the free school law, that same amount of education, which would now cost two millions of dollars, could be supplied at less than one-third of this amount. The amendment which is now proposed as a substitute for the school law of last session, is, in my opinion, of a most hateful and degrading character. It is a re-enactment of the pauper law of 1809. It proposes that the assessors shall take a census, and make a record of the *poor*; This shall be revised, and a new record made by the county commissioners, so that the names of those who have the misfortune to be poor men's children shall be forever preserved, as a distinct class, in the archives of the county! The teacher, too,

is to keep in his school a *pauper* book, and register the names and attendance of poor scholars. Thus pointing out and recording their poverty in the midst of their companions. Sir, hereditary distinctions of rank are sufficiently odious; but that which is founded on poverty is infinitely more so. Such a law should be entitled "an act for branding and marking the poor, so that they may be known from the rich and proud."—Many complain of this tax, not so much on account of its amount, as because it is for the benefit of others and not themselves. This is a mistake. It is for *their own* benefit, inasmuch as it perpetuates the government, and ensures the due administration of the laws under which they live, and by which their lives and property are protected. Why do they not urge the same objection against all other taxes? The industrious, thrifty, rich farmer pays a heavy county tax to support criminal courts, build jails, and pay sheriffs and jail keepers, and yet probably he never has and never will have any direct personal use of either. He never gets the worth of his money by being tried for a crime before the court, allowed the privilege of the jail on conviction; or receiving an equivalent from the sheriff or his hangman officers! He cheerfully pays the tax which is necessary to support and punish convicts; but loudly complains of that which goes to prevent his fellow being from becoming criminal, and to obviate the necessity of those humiliating institutions.

This law is often objected to, because its benefits are shared by the children of the profligate spendthrift equally with those of the most industrious and economical habits. It ought to be remembered, that the benefit is bestowed, not upon the erring parents, but the innocent children. Carry out this objection and you punish children for the crimes or misfortunes of their parents. You virtually establish castes and grades founded on no merit of the particular generation, but on the demerits of their ancestors; An aristocracy of the most odious and insolent kind—the aristocracy of wealth and pride.

It is said that its advantages will be unjustly and unequally enjoyed, because the industrious, money-making man keeps his whole family *constantly* employed, and has but little time for them to spend at school; while the idle man has but little employment for his family and they will constantly attend school. I know sir, that there are some men, whose whole souls are so completely absorbed in the accumulation of wealth; and whose avarice so increases with success that they look upon their very children in no other light than as instruments of gain—that they, as well as the ox and the ass within their gates, are valuable only in proportion to their annual earnings. And according to the present system, the children of such men are reduced almost to an intellectual level with their co-laborers of the brute creation. This law will be of vast advantage to the offspring of such misers. If they are compelled to pay their taxes to support schools, their very meanness will induce them to send their children to them to get the worth of their money. Thus it will extract good out of the very penuriousness of the miser. Surely a system, which will work such wonders, ought to be as greedily sought for, and more highly prized than that coveted alchymy, which was to produce gold and silver out of the blood and entrails of vipers, lizards and other filthy vermin!

Why, sir, are the colleges and literary institutions of Pennsylvania now, and ever have been, in a languishing, sickly condition? Why, with a fertile soil and genial climate, has she, in proportion to her population, scarcely one-third as many collegiate students, as cold, barren, New England? The answer is obvious—She has no free schools. Until she shall have, you may in vain endow college after college, they will never be filled; or filled only by students from other states. In New England free schools plant the seeds and the desire of knowledge in every mind, without regard to the



wealth of the parent or the texture of the pupil's garments. When the seed thus universally sown, happens to fall on fertile soil, it springs up and is fostered by a generous public, until it produces its glorious fruit.—Those who have but scanty means and are pursuing a collegiate education, find it necessary to spend a portion of the year in teaching common schools; thus in parting the knowledge which they acquire, they raise the dignity of the employment to a rank which it should always hold, honorable in proportion to the high qualifications necessary for its discharge. Thus devoting a portion of their time to acquiring the means of subsistence, industrious habits are forced upon them, and their minds and bodies become disciplined to a regularity and energy which is seldom the lot of the rich. It is no uncommon occurrence to see the poor man's son, thus encouraged by wise legislation, far outstrip and bear off the laurels from the less industrious heirs of wealth. Some of the ablest men of the present and past days never could have been educated except for that benevolent system. Not to mention any of the living, it is well known that that architect of an immortal name, who "plucked the lightnings from heaven, and the sceptre from tyrants," was the child of free schools. Why shall Pennsylvania now repudiate a system, which is calculated to elevate her to that rank in the intellectual, which, by the blessing of Providence, she holds in the natural world? To be the key-stone of the arch, the "very first among her equals?" I am aware, sir, how difficult it is for the great mass of the people who have never seen it in operation, to understand its advantages. But is it not wise to let it go into full operation, and learn its results from experience? Then if it prove useless or burthensome, how easy to repeal it? I know how large a portion of the community can scarcely feel any sympathy with, or understand the necessities of the poor; or appreciate the exquisite feelings which they enjoy when they see their children receiving the boon of education, and rising in intellectual superiority, above the clogs which hereditary poverty had cast upon them. It is not wonderful that he whose fat acres have descended to him from father to son in unbroken succession, should never have become familiar with misery, and therefore should never have sought for the surest means of alleviating it. Sir, when I reflect how apt hereditary wealth, hereditary influence, and perhaps as a consequence hereditary pride are to close the avenues and steel the heart against the wants and the rights of the poor, I am induced to thank my Creator for having from early life, bestowed upon me the blessing of poverty. Sir, it is a blessing—for if there be any human sensation more ethereal and divine than all others, it is that which feelingly sympathises with misfortune.

But we are told that this law is unpopular; that the people desire its repeal. Has it not always been so with every new reform in the condition of man? Old habits, and old prejudices are hard to be removed from the mind. Every new improvement, which has been gradually leading man from the savage through the civilized up to a highly cultivated state, has required the most strenuous, and often perilous exertions of the wise and the good. But, sir, much of its unpopularity is chargeable upon the vile arts of unprincipled demagogues. Instead of attempting to remove the honest misapprehensions of the people, they cater to their prejudices, and take advantage of them, to gain low, dirty, temporary, local triumphs. I do not charge this on any particular party. Unfortunately, almost the only spot on which all parties meet in union, is this ground of common infamy! I have seen the present chief magistrate of this commonwealth violently assailed as the projector and father of this law. I am not the eulogist of that gentleman; he has been guilty of many deep political sins. But he deserves the undying gratitude of the people, for the steady untiring zeal, which he has manifested in favor of common

schools. I will not say that his exertions in that cause have covered all, but they have atoned for many of his errors. I trust that the people of this state will never be called on to choose between a supporter and an opposer of free schools. But if it should come to that; if that should be made the turning point on which we are to cast our suffrages; if the opponent of education were my most intimate personal and political friend; and the free school candidate my most obnoxious enemy, I should deem it my duty as a patriot, at this moment of our intellectual crisis, to forget all other considerations, and I should place myself unhesitatingly, and cordially, in the ranks of him, whose banner streams in light. I would not foster nor flatter ignorance, to gain political victories, which however they might profit individuals, must prove disastrous to our country. Let it not be supposed from these remarks, that because I deem this a paramount object, that I think less highly than heretofore of those great, important cardinal principles, which for years past have controlled my political action. They are, and ever shall be, deeply cherished in my inmost heart. But I must be allowed to exercise my own judgment as to the best means of effectuating that and every other object which I think beneficial to the community. And according to that judgment, the light of general information, will as surely counteract the pernicious influence of secret, cab-bounded, murderous institutions, as the sun in heaven dispels the darkness and damp vapours of the night.

It is said that some gentlemen here owe their election to their hostility to general education. That it was placed distinctly on that ground, and that others lost their election by being in favor of it, and that they consented to supersede the regularly nominated candidates of their own party, who had voted for this law—it may be so. I believe that two highly respectable members of the last legislature, from Union county, who voted for the school law, did fail of re-election on that ground only. They were summoned before a county meeting, and requested to pledge themselves to vote for its repeal, as the price of their re-election. But they were too high-minded and honorable men to consent to such degradation. The people, incapable for the moment of appreciating their worth, dismissed them from their service. But I venture to predict that they have passed them by only for the moment. Those gentlemen have earned the approbation of all good and intelligent men more effectually by their retirement, than they could ever have done by retaining popular favor at the expense of self humiliation. They fell, it is true, in this great struggle between the powers of light and darkness; but they fell as every Roman mother wished her sons to fall—facing the enemy, with all their wounds in front.

True it is, also, that two other gentlemen, and I believe two only, lost their election on account of their vote on that question. I refer to the late members from Berks, who were candidates for re-election; and I regret that gentlemen, whom I so highly respect, and whom I take pleasure in ranking among my personal friends, had not possessed a little more nerve to enable them to withstand the assaults which were made upon them; or if they must be overpowered, to wrap their mantles gracefully around them and yield with dignity. But this, I am aware, requires a high degree of fortitude; and those respected gentlemen distracted and faltering between the dictates of conscience, and the clamor of the populace, at length turned and fled; but duty had detained them so long that they fled too late; and the shaft, which had already been winged by ignorance, overtook and pierced them from behind. I am happy to say, sir, that a more fortunate fate awaited our friends from York. Possessing a keener insight into futurity, and a sharper instinct of danger, they saw the peril at a greater distance, and retreated in time to escape the fury of the storm; and can now safely boast

that "discretion is the better part of valor," and that "they fought, and run away," "and live to fight—on 'tother side."

Sir, it is to be regretted that any gentleman should have consented to place his election on hostility to general education. If honest ambition were his object, he will ere long lament that he attempted to raise his monument of glory on so muddy a foundation. But if it be so that they were placed here to obstruct the diffusion of knowledge, it is but justice to say that they fitly and faithfully represent the spirit which sent them here, when they attempt to sacrifice this law on the altars, which at home, among their constituents they have raised and consecrated to intellectual darkness; and on which they are pouring out oblations to send forth their foetid and noxious odours over the ten miles square of their ambition! But will this legislature—will the wise guardians of the dearest interests of a great commonwealth, consent to surrender the high advantages and brilliant prospects which this law promises, because it is desired by worthy gentlemen, who in a moment of causeless panic and popular delusion, sailed into power on a Tartarean flood? A flood of ignorance, darker, and to the intelligent mind, more dreadful, than that accursed Stygian pool, at which mortals and immortals tremble! Sir, it seems to me that the liberal and enlightened proceedings of the last legislature have aroused the demon of ignorance from his slumber; and, maddened at the threatened loss of his murky empire, his discordant howlings are heard in every part of our land!

Gentlemen will hardly contend for the doctrine of cherishing and obeying the prejudices and errors of their constituents. Instead of propitiating smooth things, and flattering the people with the belief of their present perfection, and thus retarding the mind in its onward progress, it is the duty of faithful legislators to create and sustain such laws and institutions, as shall teach us our wants—foster our cravings after knowledge, and urge us forward in the march of intellect.—The barbarous and disgraceful cry, which we hear abroad in some parts of our land, "that learning makes us worse—that education makes men rogues," should find no echo within these walls. Those who hold such doctrines any where, would be the objects of bitter detestation, if they were not rather the pitiable subjects of commiseration. For even voluntary fools require our compassion as well as natural idiots!

Those who would repeal this law because it is obnoxious to a portion of the people, would seem to found their justification on a desire of popularity. That is not an unworthy object, when they seek that enduring fame, which is constructed of imperishable materials.—But have these gentlemen looked back and consulted the history of their race, to learn on what foundation, and on what materials that popularity is built which outlives its possessor—which is not buried in the same grave which covers his mortal remains? Sir, I believe that kind of fame may be acquired either by deep learning, or even the love of it; by mild philanthropy, or unconquerable courage. And it seems to me, that in the present state of feeling in Pennsylvania, those who will heartily and successively support the cause of general education, can acquire, at least some portion of the honor of all these qualities combined; while those who oppose it will be remembered without pleasure, and soon pass away with the things that perish. In giving this law to posterity, you act the part of the philanthropist, by bestowing upon the poor as well as the rich the greatest earthly boon, which they are capable of receiving; you act the part of the philosopher by pointing, if you do not lead them up the hill of science; you act the part of the hero, if it be true as you say, that popular vengeance follows close upon your footsteps. Here then, if you wish true popularity, is a theatre on which you may acquire it. What renders the name of Socrates immortal, but his love of the human

family, exhibited under all circumstances and in contempt of every danger? But courage, even with but little benevolence, may confer lasting renown. It is this which makes us bow with involuntary respect, at the names of Napoleon, of Cæsar and of Richard of the Lion heart. But what earthly glory is there equal in lustre and duration to that conferred by education?—What else could have bestowed such renown upon the Philosophers, the Poets, the Statesmen, and Orators of antiquity? What else could have conferred such undisputed applause upon Aristotle, Demosthenes, and Homer; on Virgil Horace, and Cicero? And is learning less interesting and important now than it was in centuries past, when those statesmen and orators charmed and ruled empires with their eloquence?

Sir, let it not be thought that those great men acquired a higher fame than is within the reach of the present age. Pennsylvania's sons possess as high native talents as any other nation of ancient or modern time! Many of the poorest of her children possess as bright intellectual gems, if they were as highly polished, as did the proudest scholars of Greece or Rome.—But too long—too disgracefully long, has coward, trembling, procrastinating legislation permitted them to lie buried in "dark unfathomed caves."

If you wish to acquire popularity, how often have you been admonished to build not your monuments of brass or marble, but make them of ever-living mind!—Although the period of yours, or your children's renown, cannot be as long as that of the ancients, because you start from a later period, yet it may be no less brilliant. Equal attention to the same learning; equal ardor in pursuing the same arts and liberal studies, which has rescued their names from the rust of corroding time, and handed them down to us untarnished from remote antiquity, would transmit the names of your children, and your children's children in the green undying fame down through the long vista of succeeding ages, until time shall mingle with eternity.

Let all, therefore, who would sustain the character of the philosopher or philanthropist, sustain this law.—Those who would add thereto the glory of the hero, can acquire it here; for in the present state of feeling in Pennsylvania, I am willing to admit, that but little less dangerous to the public man is the war-club and battle-axe of savage ignorance, than to the Lion Hearted Richard was the keen scimitar of the Saracen. He, who would oppose it, either through inability to comprehend the advantages of general education; or from unwillingness to bestow them on all his fellow citizens, even to the lowest and the poorest; or from dread of popular vengeance, seems to me to want either the head of the philosopher, the heart of the philanthropist or the nerve of the hero.

All these things would be easily admitted by almost every man, were it not for the supposed cost. I have endeavored to show that it is not expensive; but admit that it were somewhat so, why do you cling so closely to your gold? The trophies which it can purchase; the idols which it sets up, will scarcely survive their purchaser. No name, no honor can long be perpetuated by mere matter. Of this, Egypt furnishes melancholy proof. Look at her stupendous pyramids, which were raised at such immense expenses of toil and treasure.—As mere masses of matter they seem as durable as the everlasting hills, yet the deeds, and the names which they were intended to perpetuate, are no longer known on earth. That ingenious people attempted to give immortality to matter, by embalming their great men and monarchs. Instead of doing deeds worthy to be recorded in history, their very names are unknown, and nothing is left to posterity but their disgusting mortal frames for idle curiosity to stare at. What rational being can view such soulless, material perpetuation with pleasure? If you can enjoy it, go, sir, to the foot of Vesuvius; to Herculaneum, and Pompeii, those eternal monuments of human weakness. There, if you see

such value on material monuments of riches, may you see all the glory of art, the magnificence of wealth, the gold of Ophir, and the rubies of the East preserved in indestructible lava along with their haughty wearers, the cold, smooth, petrified, lifeless, beauties of the "Cities of the Dead."

Who would not shudder at the idea of such prolonged material identity? Who would not rather do one living deed, than to have his ashes forever enshrined in ever-burnished gold. Sir, I trust, that when we come to act on this question we shall all take lofty ground—look beyond the narrow space which now circumscribes our vision—beyond the passing, fleeting point of time on which we stand; and so cast our votes that the blessing of education shall be conferred on every son of Pennsylvania—shall be carried home to the poorest child of the poorest inhabitant of the meanest hut of your mountains, so that even he may be prepared to act well his part in this land of freemen, and lay on earth, a broad and a solid foundation for that enduring knowledge, which goes on increasing through increasing eternity.

#### A SUPPLEMENT

To the Act to establish a General System of Education by Common Schools, passed the first day of April, one thousand eight hundred and thirty four.\*

Section 1. That the tax authorised to be assessed and levied by the several school divisions and districts by the act entitled "An act to establish a general system of education by Common Schools," passed the first day of April, one thousand eight hundred and thirty four, (to which this is a supplement,) shall be assessed and levied on the same articles as the State tax is now assessed and levied on, and on all posts of profit, professions, trades, occupations or callings, not exceeding one and a half times the amount assessed on the same for county purposes, and if the taxes assessed on unseated land, and not otherwise collected, the collection thereof may be enforced in the same manner as the collection of taxes on unseated lands is enforced when assessed for county purposes.

Section 2. Where any township or district in any school division, votes in the negative, on the question of accepting the law to which this is a supplement, said township or district shall not be compelled to accept the same, although a majority of the delegates to the joint meeting of said division, vote in the affirmative; but said township or district shall be in like condition with regard to said law, as if a majority of said joint delegate meeting had voted in the negative.

Section 3. The office of inspector is hereby abolished, and all the duties of said inspectors, are transferred to the directors of the several districts.

Section 4. When the affirmative votes on the acceptance of the law to which this is a supplement, are a minority of the joint meeting of the delegates of any division, the tax voted to be raised by said affirmative delegates, shall be levied, assessed, and collected, in the same manner as if a majority of said joint meeting had voted in the affirmative: And said minority shall have the same power to call meetings of the people within their several districts, as the joint meeting would have had, had a majority thereof voted in the affirmative, and this is declared to be the meaning of the law to which this is a supplement.

Section 5. In any case where a majority of the qualified citizens of any school district, assembled agreeably to the provisions of this act, and the act to which this is a supplement, shall decide against accepting the law, and that no tax shall be levied for common schools, the acts of assembly to provide for the education of the poor gratis, shall be continued in force in said district, for the current year, and every such district, for that year, shall be entitled to no part of the

State appropriation; but the amount which such district would have been entitled to had it determined to levy a tax for common schools, shall remain and accumulate in the county treasury for two years, for the use of such district: Provided, That if within that time, such district shall not levy a tax as aforesaid, then the proportion to which such district would have been entitled, shall be distributed among the other districts in each county, which shall have levied a tax: And provided, That such accumulation for any district shall not a second time be allowed, but the money shall be distributed among the districts, as provided by the sixth section of the act to which this is a supplement, until such district shall accept the law and levy a tax as aforesaid.

Section 6. In all meetings of the people in the several districts, directed by the act to which this is a supplement, no persons shall be entitled to vote except those who are entitled to vote for members of the Legislature.

Section 7. Immediately after the passage of this supplement, the Secretary of this Commonwealth shall cause circular letters, with the said supplement attached thereto, to be addressed to the county commissioners of each county; and it shall be the duty of the commissioners aforesaid, to publish the same in one, and not more than two newspapers, in the county, if there be one or more published therein, for three successive weeks, in such manner as shall secure the timely organization under this supplement, according to the provisions thereof, the expense to be defrayed out of the county treasury.

From the Pittsburg Gazette.

#### NEW ITEMS OF TRADE.

As our country advances in its rapid, onward march, new sources of national wealth and individual ingenuity and enterprise are rapidly developed. Almost every year some new item of American genius and industry is added to our catalogue of comforts and permanent supplies.

This week, amongst our very numerous arrivals, by our rivers, are two large covered flat boats, or arks, from Jamestown, Chataque county, New York—one entirely laden with patent window sash, of the very best quality, from the manufactory of Messrs. Benham & Scott. This is the second cargo these gentlemen have brought to our market. On their first arrival they could hardly find buyers, and had to leave a good deal to sell on commission—now they experience very ready sales. Two or three days since, one of our merchants bought from them about 400 dozen of sash; and yesterday, the same merchant sold 2,000 dozen to a merchant of Galena, at the lead mines, in Missouri; and they were forthwith shipped for St. Louis, on board the steam boat "Ioway."—Thus, this lot of sash was brought from the State of New York, about 300 miles, by the Allegheny river, and is now taken about 1,700 miles by steam boats, which makes about 2,000 miles of water transportation before they are used; and may, when they arrive at Galena, be sold for another far distant market.

The other boat was laden entirely with patent wooden buckets and keelers, from Mr. E. Woods' factory, in the same town. These buckets are of the best quality, and the owner found an immediate purchaser of the whole cargo in one of our large commission houses. These, like many other enterprising manufacturers, bring the fruits of their industry to our city for sale, and take back, in part payment, our manufactured goods—such as window glass, nails, paints, &c. &c.—thus showing the immense advantages of home industry, skill, enterprise, and a cheap internal water communication, in this vast and growing country.

J. Miner, & Co. of Fallstown, Beaver county, Pa. have also a very extensive Patent Bucket and Tub Fac-

\* See Reg. Vol. XIII. p. 287.

tory, in very active operation, and make the very best quality of ware—and such is their present demand, that they have orders for several hundred dozen more than they can at once supply. At the same place, the same gentlemen have an extensive Patent Sash manufactory in operation, in connexion with Messrs. Rhey's and they make every size of the best sash, and do a very considerable business.

One mercantile house in our city sells upwards of a thousand dozen of window sash per annum, with a rapidly increasing demand.

#### A MERCHANT.

#### SOUP SOCIETY.

The Society for Supplying the Poor with Soup, having found it necessary to open their establishment, during a part of the late severe winter, consider it due to those from whom they received assistance and others, to render a brief account of their operations, and they do this with great pleasure, believing as they do that it will enable the public generally to see more clearly the great advantage this charity possesses, in the quickness with which it can, after several years suspension, be put into operation, and the cheap rate at which a comfortable and nourishing aliment is afforded to the poor, with scarcely a possibility of misapplication.

It had not been considered necessary to distribute Soup since the 19th of the second month, 1832, until the past winter. The Society was called together on the morning of the 21st, the house was opened for the delivery of Soup, and continued so until the 14th ultimo, (nearly eight weeks,) in which time seven hundred and twenty-two adults and one thousand and nineteen children, (about equal proportion of white and colored,) were supplied with ten thousand four hundred and sixty-five quarts of rich wholesome soup, at an expense of rather less than three hundred dollars. It also distributed several hundred loaves of bread, some wood and other articles.

JOHN WILSON MOORE,

President.

MERRIT CANNY, Sec'y.

Philadelphia, 4th mo. 1835.

#### SOIL OF CRAWFORD COUNTY.

Many persons have an idea that the soil of this county is not equal to that of many others in the state—but the assertion may be made without the fear of contradiction, that there are but few if any counties in the state, which contain a greater proportion of good arable land, or land which will prove more productive, allowing ours the same advantages in tilling. As a proof of the fertility of our soil, and the advantages arising from proper cultivation, we would remark, that, during the past season (a season when the grass generally fell short) one of our farmers produced *Ten* tons of Timothy, from two acres, and a small fraction, of land. This immense cutting, was from *hill* land, such as in this county is seldom devoted to the production of hay, and was not considered more than of medium quality compared with the land of the *whole* county. This fact will exemplify the great advantages to be derived from the tilling a *small* farm, and devoting upon it, as much labor as is generally expended by our agriculturists upon their large farms. This course will in the end, save labor, and also taxes. To individuals who are unsettled and looking for farms, we know of no county or country, which presents more attractions than *Crawford* county. Land of good quality can be bought in any quantity at from two to eight dollars per acre cleared or wild the prices varying according to proximity to navigable streams, or villages. Agricultural productions bear a high price. Hay is now selling at from

ten to eleven dollars cash per ton of 2000 lbs. wheat one dollar per bushel, potatoes at — cents, other articles bear prices in proportion.—*Crawford Messenger*.

APRIL 18.

**Snow Beef.**—Lancaster county has always been famed for fine Beef, and we believe no market in the State is better supplied with the article than that of Columbia. We venture to say, that on Wednesday last we saw five as handsome and well-fed Steers as could be found any where. They belonged to Messrs. Collins, Swartz and Charles, butchers of this place, and their respective weights were as follows, viz:—2,035, 1,920, 1,710, 1,695, 1,625. Three of them were slaughtered and sold in our market this morning.—*Columbia Spy*.

#### TRADE OF THE WEST.

**Cotton.**—The Commercial List of Saturday last says,—“The enquiry has frequently been made, but never satisfactorily answered, ‘What is the actual cost of the transportation of Cotton from Nashville, Tennessee, to Philadelphia?’ From an authentic source we are enabled to furnish the following satisfactory answer to the above question.

Cost of transporting Cotton from Nashville, Tenn. to Philadelphia, by the Ohio river, and Pennsylvania Canals and Rail roads, computing a bale at 400 lbs.

Freight from Nashville to Pittsburg,	\$1 75
Drayage at Pittsburg to Canal Basin,	08
Commission,	20
Freight to Philadelphia, 62½ per 100 lbs.	2 50
Drayage at Philadelphia,	12

Total, \$4 65

being a fraction over 1½ cent per lb.

The time required would be seven days, allowing one day each at Nashville and Pittsburg; for receipt and shipment from Pittsburg to Philadelphia, twelve days—making in all, twenty-one days.

#### THE REGISTER.

PHILADELPHIA, MAY 2, 1835.

The Stock (6000 shares) of the Pennsylvania and Ohio Canal, was on Monday last, all taken.

A great deal of rain has fallen during the passing week, and on Tuesday there was a considerable freshet in the Schuylkill—said to have been 5 feet over the dam at Fair Mount.

The article in our last No. giving the list of vessels built, should have been credited to the “Commercial List,” instead of the “Herald.”

The Hon. T. McK. PERRY, has been appointed by the Governor, President Judge of the District Court.

We publish to-day, the Supplement to the School Bill, and Mr. Stevens's excellent speech on the subject.

Printed every Saturday morning by WILLIAM F. GEDDES, No. 9 Library street.

The publication office of the Register has been removed from Franklin Place, to No. 61, in the Arcade, Western Avenue, up stairs.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.--NO. 19.

PHILADELPHIA, MAY 9, 1835.

No. 383.

From the National Gazette.

## DOMESTIC ATTACHMENT.

Reference being made by the Commissioners appointed to revise the Civil Code of Pennsylvania, in their Report, read in the Senate on the 28th of March, 1835, to the case of *Thurneyssen et al. vs. Vouthier* &c., it is thought proper to publish the Opinion delivered by the District Court in that case. This seems to be the more necessary, because, if there be legislation upon the subject, to supply an apprehended defect in the law, a more precise knowledge of the case than is possessed by the legislature and the profession, is desirable for the application of a full and adequate remedy.

The first section of the Bill relating to Domestic Attachments, as prepared by the Commissioners, stands thus:

"Sect. 1. Writs of domestic attachment may be issued by the Court of Common Pleas of the County in which any debtor, being an inhabitant of this Commonwealth, may reside, if such debtor shall have absconded or departed from the place of his usual abode within the same, or shall have remained absent from this Commonwealth, or shall have confined himself in his own house, or concealed himself elsewhere, with the design in either case to defraud his creditors, and without having a clear real estate in fee simple, within this Commonwealth, sufficient to pay his debts.

"And the like proceedings may be had, if any debtor, not having become an inhabitant of this Commonwealth, and not having real estate, as aforesaid, shall confine or conceal himself within the county, with intent to avoid the service of process and to defraud his creditors."

The Commissioners in their Report, p. 38, thus express their understanding of this section of the Bill.—

"Sect. 1, declares the cases in which a domestic attachment may be issued, and the Court which shall have jurisdiction. The first branch of this section is taken from the first section of the act of 1807. In the last paragraph we have extended the process to the case of a person non resident in the Commonwealth, but who is personally present in the County, and conceals himself or otherwise avoids the service of process. A recent instance in the city of Philadelphia, has proved the expediency of a provision of this kind. It appears to us that the foreign attachment and domestic attachment ought together to cover the whole ground, and leave no defect of justice. In the case we have mentioned, a foreign attachment could not be maintained, because the debtor is actually within the county, and in consequence of his confinement or concealment, a *copias* cannot be served upon him. The remedy seems to be to extend the writ of domestic attachment to meet such cases."

The first paragraph of the section restricts original jurisdiction to the Court of Common Pleas; but the 43d section gives an appeal to the Supreme Court. As Error does not lie in Attachments, and concurrent jurisdiction with the Supreme Court might not always avail in cases of imputed mistake in the inferior tribunal, this change is a decided improvement.

The last paragraph of the section, quoted above, is intended to be remedial of the law as expounded by the

District Court. Stress, however, is laid in its Opinion upon the preamble to the act of 1705, which distinguishes between foreign and domestic creditors, respecting whom the section is silent. The expression too, "if any debtor, not having become an inhabitant of this Commonwealth," is perhaps capable of misconstruction, and *might* not be applied according to the intentions of its framers. It may be made to express the case it is intended to include, by the introduction of a few words: "If any debtor be actually within the county (why not *state*?) at the time of suing out the writ, though he may not have become an inhabitant of this Commonwealth," &c.

Most of the material facts of the case below, appear in the Judge's Opinion. The District Court having decided, upon full argument, against the principles asserted by the Plaintiff's counsel, another writ of Domestic attachment was issued from the Supreme Court. The case has not been decided by the superior tribunal.

In the District Court for the City and County of Philadelphia—December Term, 1834.

## DOMESTIC ATTACHMENT.

THURNEYSSSEN & Co. vs. VOUTHIER FILS.

J. R. Ingersoll and J. R. Tyson for plaintiffs, and Josiah Randall and George M. Dallas, for defendant.

The following Opinion of the Court was pronounced by COXE, Judge, on the 7th March, 1835:

On the 5th November, 1834, the defendant arrived in this city in a steamboat from New York, with his wife, and M. and Mde. Carriere, her parents and baggage. The defendant was an entire stranger. After applying at several hotels, recommended or pointed out by his porter, for lodgings, without success, his baggage and family were left at a boarding house, while the defendant having hired a horse and gig, proceeded with a boy through the city in search of a house, and to attend with M. Carriere to the landing of some goods at a wharf. Having found an empty house to let in Pine street, he proceeded to the residence of Mrs. Dougherty, the owner, on the same day of his arrival, and applied to her, to *rent him the house until May*.—He said he was from England, where he had resided for twelve years, that he was a Frenchman—he spoke English remarkably well—he said he had no acquaintances here, and therefore could not give any security for the rent, but he would pay it in advance; that his name was Leman, that his family consisted of his father, whom he called M. Carriere, his mother and his wife. Mrs. D. agreed to let him have the house for *six months*, at the rate of 500 dollars per annum, payable in advance. The rent has been paid, a small deduction being made on account of a stable, which was not eventually taken. The defendant procured the key of the house and proceeded to procure mattresses and some articles of kitchen and other necessary furniture, and the next day was found by the owner in the house. The defendant did not use his real name.

A writ of Foreign Attachment was issued against the defendant at the suit of plaintiffs in this action, demanding bail in the sum of 86,000 dollars, and three other writs against the defendant by different names or addi-

tions were soon after issued, demanding in each case, bail in \$7,000 dollars for the same debt. On the 19th November, all were levied.

The defendant made affidavit before Alderman Badger, that he was at the time of issuing these writs of attachment, and had been ever since, a resident of this city; that with his family he had occupied a house in this city for some time prior to that time, and had lived there since without interruption; that he had consulted Mr. Dallas in his office the same day—that the goods attached were not his property, but as he believes are the property of M. Carrière.

A rule to show cause why the foreign attachment should not be quashed was entered.

A *capias ad respondendum* was issued by the plaintiffs against the defendant, and bail was demanded in \$7,000 dollars for the same debt, the property being then in custody of the sheriff under the foreign attachments, and the said rule being at the time pending. Keran Fitzgerald, a new watchman, was placed in charge of the goods attached by the sheriff after the *capias* had issued.

While all the above writs were in the hands of the sheriff as aforesaid, an affidavit was prepared and duly sworn to in behalf of the same plaintiffs against the defendant for the purpose of grounding a domestic attachment for the same debt, reducing its amount however, to from 132,263 fr. 65c. to \$26,752 33, and stating that the defendant "has absconded from the place of his usual abode in this State, with design to defraud his creditors," and has not left a clear real estate, &c. sufficient to pay his debts.

The rule to show cause was made absolute, and the foreign attachment dissolved by the court. A writ of domestic attachment, based upon the above affidavit issued while the *capias ad respondendum* was in full force, the 1st of December being the return day, and service of the writ during any subsequent part of that day by the sheriff being legal. The defendant, from the time of his arrival in this State to the issuing of the process against him, by assuming a false name and some other circumstances, was in disguise and concealment; after the issuing of the *capias* he absented himself from his family and the house in which he lived and took lodgings in another street for the purpose of avoiding the arrest under it.

The plaintiffs proved by documents recently received from England, that the defendant was declared bankrupt in the Court of Commissioners of Bankrupts in London, on the 17th November last, on a petition dated the 13th of the same month, and he is therein described as of No. 13, Rue de Clery, in Paris, France.

It was also proved that the defendant was naturalized as a citizen of the United States, at New York, in 1829.

Simultaneously with these several suits and proceedings against the defendant in this court, he appears to have been proceeded against in London as aforesaid, and up to the 9th of December, after the issuing of the writ of domestic attachment, he is described as of No. 13 Rue de Clery, Paris, &c.

A *capias ad respondendum* issued at the suit of A. Lenthell & Co. against the defendant, demanding bail in 1200 dollars, received of N. E. J. given in evidence by the plaintiffs, and affidavit being filed of the cause of action, stating the plaintiffs to reside in New York, the claim to lie on a bill of exchange drawn by Gulliet de la Bonglin & Co., dated St. Quentin, 19th July, 1834, for 3,583fr. 15c., money of France, payable at the end of October, 1834, to the order of said Gulliet de la Bonglin & Co. and endorsed to the plaintiffs, and directed to Vouthier fils, Rue de Clery, No. 13, Paris, and accepted by his attorney in fact; that plaintiff is informed, and believes said Vouthier is now in Philadelphia, and that since the acceptance he has absconded from his domicile in France, and has arrived

in Philadelphia, where he keeps concealed with design to defraud his creditors, &c.

The defendant applied for a rule to show cause why the domestic attachment should not be quashed, and filed his affidavit in support of the rule, stating the facts.

In support of the rule the Counsel for the defendant contended—

1. That Vouthier had not a usual place of abode in this State, had engaged in no trade, and contracted no debts therein, and had no resident creditors here, whom by absconding he could defraud, and consequently was not subject to this process.

2. That the *capias ad respondendum* was vexatiously and oppressively issued, and avoiding arrest under it if he were a resident and otherwise liable, was not an absconding with design to defraud his creditors, but was a proper measure of self-defence under the circumstances rendered so by the abuse of the process of the Court.

3. That the *capias* being in full force, and that suit not having been discontinued before issuing the domestic attachment, the latter proceeding is irregular.

It will not be necessary for the Court to consider more than the first position.

1. The defendant residing and trading in Paris, appears to have sailed for the United States in the last Autumn, probably by way of England, with his wife and her parents. Having arrived at New York, he shortly after came with these persons to Philadelphia, where he was an entire stranger, and evidently in disguise and under an assumed name; he never expressed any intention permanently to reside here, and was probably a fugitive from his foreign creditors.—He applied for the house of Mrs. Dougherty, not for a year or quarter or half year, but in the month of November he applied to rent it until May, which would be less than six months; describing himself as a stranger unable to give security, offering to pay in advance, and expressing no intention to remain beyond May.—There was therefore in the manner of taking the house a strong intimation that it was intended as a merely temporary residence, and that he had no intention of fixing his residence in Philadelphia, and at the time of withdrawing from his family to avoid the *capias* and the issuing of the domestic attachment, he had no creditor whose debt was contracted here but the owner of the house, who was amply secured by the property on the premises, and who has since been paid. There is no domestic creditor who applies for relief or protection under the attachment laws, and no such creditor is known to the Court to exist.

It will be necessary for the Court to review the state of the law as to domestic attachments prior to the act of the 4th Dec. 1827, Purd. Dig. 70, as it has been argued that the decisions of our courts prior to that act, were made under enactments essentially differing from it in the description of the persons liable to the writ, and consequently are not authority upon the question now under consideration.

So early as 1705, the Legislature of Pennsylvania, in the preamble of an act entitled "An Act about Attachments," declared the mischiefs or inconvenience that the act was intended to remedy, in these words:

"Whereas, the laws of this government have hitherto been deficient in respect to attachments, so that the effects of persons absconding are not equally liable with those persons upon the spot to make restitution for debts contracted in or owing in this province, to the great injury of the inhabitants thereof, and encouragement of such unworthy persons as frequently, by absconding, make an advantage of the defect aforesaid."

The debtor is here described as "absconding" and "absenting," in contradistinction to those persons dwelling "upon the spot," the debts as "contracted

or owing within this Province," the persons to be protected by the act as "inhabitants thereof."

Although foreign creditors are allowed upon principles of liberal justice to secure their debts in cases in which a defendant has been brought within the principles of the Domestic Attachment laws, it will be found that in order to ground such a proceeding under all the acts of Assembly which have since been in operation, this description in 1705 of the debtor, of his debts, and of his creditors as the principal objects of legislative protection, has never been substantially changed, and have been recognized and sustained by judicial decisions without exception.

The Act of 2d March, 1723, Purd. 69, provides that no writ of attachment shall be issued but on oath or affirmation that the defendant in such attachment is indebted to the plaintiff therein named, in the sum of \$40 or more, and that the defendant is and has been absconded from the place of his usual abode for the space of six days, with design to defraud his creditors, as is believed, and that the defendant has not left a clear real estate, in fee simple, within this province sufficient to pay his debts, &c.

On 22d Jan. 1774, was passed "An Act to oblige Trustees and Assignees of Insolvent Debtors to execute their trusts." Carey & Bioren, 2 vol. 116, sec. 4, which has not been cited on the argument. It provides:

"And whereas, the laws of this Province respecting *Domestic Attachments* are defective, inasmuch as they do not empower the justices to issue writs of attachments against persons who shall confine or conceal themselves within their own houses, or elsewhere, with intent to defraud their creditors.

"Be it therefore enacted, that if it shall appear on oath, &c. 'that his or their debtor or debtors, have concealed him or themselves elsewhere, for and during the space of six days, with design to defraud his, her, or their creditors as is believed, and that he, she, or they, have not a clear real estate,' &c. as in former act."

The only difference between the act of 1807 as to the debt, is the omission of the necessity of its amounting to \$40. As to the debtor, it adds to the acts to defraud his creditors, which will render him liable to the writ that he has "remained absent from the State," and the words for and during six days are omitted. It is, therefore, clear that no alteration was made in the laws existing prior to 1807, by this act relating to the character of the defendant, the debt, or the creditors, so far as involved in the case under consideration, and that all judicial determinations under the acts of 1723 and 1774, apply with full force to the act of 1807 upon the questions under consideration.

We shall therefore proceed to consider the cases which we regard as judicial authorities, operative upon the case and obligatory upon the court. The disjunctive conjunction used in stating the various acts of concealment, absconding, &c. in the act of 1807, on which great stress has been laid, has been introduced in fact from the act of 1774, and the construction based upon its use in the former would equally apply to the latter act.

In Lazarus Barnett's case, Judge Shippen has ably reviewed these three acts of Assembly of 1705, 1723 and 1774, the latter being cited as 14 Gen. 3. c. 5.

He considers three sorts of debtors to be included in the act of 1705 1st. Those who never resided here. 2. Those who had, but had absconded or otherwise removed, both being non-residents within the third section; and, 3d. Those who were about to remove without security to their creditors. In the act of 1723 it is stated "that divers irregularities and fraudulent practices had happened to the injury of such creditors as were willing to accept an equal share of the effects of their debtors. He then enquires to which of these three descriptions of debtors the preamble applies.

It could not be the first, they resided abroad and their effects coming here only occasionally there was no great

danger of fraudulent practices. And the act of 1723, by continuing the former remedy against them, is regarded by Judge Shippen as making this manifest. The act of 1723 makes a new provision with respect to both the other classes, which are consolidated in one, "persons who have absconded from their usual place of abode for six days, with design to defraud their creditors, without regard to their being in or out of the province. If they had absconded with design to defraud their creditors, the act of 1774 merely multiplies the acts, with design to defraud which later acts of Bankruptcy, bring the defendant within the statute. The preamble of the act of 1774, may be said also to apply most evidently to domestic creditors.

The word "inhabitant" has a plain meaning. A person coming hither occasionally as a Captain of a ship, in the course of trade, cannot be called an inhabitant; nor does a person going from his settled habitation here, on occasional business to Boston, or any other place cease to be an inhabitant. But a man who comes from another place to reside among us, introduces his family, takes a house, engages in trade, contracts debts, and, after some time runs away with design to defraud his creditors, he ought surely to be considered as such an inhabitant as not to be an object of the foreign attachment, but of the domestic one.

Such has been the uniform construction of the law from 1724 until the act of 1774, which last gives a legislative sanction to the practice.

After reviewing the numerous cases cited on both sides of the argument, we have found ourselves brought back to this most clear and satisfactory authority which, although the leading case on Domestic Attachments, has never been overruled or been shaken by judicial decision. In some instances, efforts have been made to modify it, particularly to fix a definite time during which a defendant must have resided, engaged in trade and contracted debts, but no time has yet been judicially settled. Probably no particular or specific time may be necessary, but the defendant must in fact reside here, and contract debts here, and subsequently abscond from the place of his usual abode in this state, &c. with design to defraud his creditors.

Judge Shippen has said in reference to the preamble of the act of 1723 it could not mean the first class of debtors, as there was no danger of fraudulent practices in relation to them, they residing abroad—so there could be no such danger requiring legislative interposition in relation to foreign creditors whose debts were not contracted here.

The defendant cannot be regarded as within this description. He was a stranger in disguise, flying from his domicile in Paris, to avoid foreign creditors, temporarily concealing himself in Philadelphia, in a house taken for that purpose, and not with a view to a permanent residence: no debts contracted here that he could by absconding defeat; no domestic creditor existing; none whom he could have designed to defraud by absconding or concealing himself.

The practice of the Courts of this State in relation to domestic attachments has been too long settled to be now disturbed without legislative enactment. The affidavit to ground the suit in the case before us, which is well drawn, shows the views entertained by the Counsel in relation to that practice.

The Court being of opinion that the defendant is not the subject of a domestic attachment, order the rule to be made absolute.

Attachment dissolved.

WELLSBOROUGH, TIOGA CO. PA. April 25.

Mr. Alpheus W. Wilson, sawed on the 10th inst in the Spencer mill, in Richmond township in this county, a pine log fourteen feet long, which made one thousand and fifty feet of boards—nine hundred and fifteen of which were first rate panel.

## REPORT ON THE EASTERN PENITENTIARY.

*Sixth Annual Report of the Inspectors of the Eastern State Penitentiary of Pennsylvania.—Made to the Legislature at the session of 1834-5.*

To the Honorable the Senate and House of Representatives of the Commonwealth of Pennsylvania.

The Inspectors of the Eastern Penitentiary in all their former reports, have spoken encouragingly of the effects of the system adopted by Pennsylvania, without however venturing a positive assertion as to its efficacy in producing the end intended. They commence this their Sixth Annual Report, with undiminished confidence in the healthful operation of the system; and they believe when all the necessary means to perfect it shall have been allowed, the State may boast of an Institution, whose efficiency in checking the career of vice within her borders, will be manifest in the reduced proportion which her criminal, will bear to her general population.

In the capacity of official agents for the State, appointed to watch over, and report, upon the progress of this important experiment, the law requires that we shall annually present statistical accounts of the Institution under our charge, together with such observations on the effects of the system as may arise or be suggested in the performance of our duties. Since the subject of solitary or separate confinement of convicts has claimed public attention, the theory has been canvassed in all its parts; and the various treatises which have sprung up have engrossed the entire field, and have left us nothing to say but that which has already been better said by practised writers, who have given to the subject all the attention which wise heads and humane hearts could bestow. The exclusiveness however of this establishment from all other matters which ordinarily engage the attention of the Legislature, induce us to endeavor to present in a proper light, the system emphatically pronounced Pennsylvanian, in contradistinction to all others in use, and in showing the difference in the motives of its origin, and in its operation, satisfy those who feel interested in it, that it is an institution of which Pennsylvania may be justly proud.

It will appear entirely consistent with the character of the state, that she should adopt a mild system of criminal jurisprudence, when it will be recollected that the laws instituted by her founder while she was yet a province, were characterized by features of humanity, at total variance with all others then extant. It is true, these laws were abrogated when the King assumed immediate authority over the colony, but the germ was then set, the spirit was then infused, and the subsequent struggles of philanthropists was but to bring to light and to fructify the plant. The innovation was then made, and it was but a recurrence to those first principles of government which were dictated by pure hearts and sound judgments, that Pennsylvania resorted to, when she established her present penitentiary system.

Notwithstanding the numerous attempts to possess the people generally with a knowledge of the principles which govern the Eastern Penitentiary, many mistaken notions are yet afloat in regard to it; and much misapprehension yet exists. A wide currency has been given to gross misrepresentations through the agency of some fanatics upon prison discipline whose motives are questionable; and in very many instances, there have been wilful and unwarrantable perversions of truth. We find it even difficult to shake off from the minds of some of our own citizens the idea that the penalties of the present mode are severe, so closely does the notion of great personal suffering connect itself with that of lonely incarceration.

The Pennsylvania system is emphatically a mild and humane system. Let us look for a moment at the con-

dition of the majority of those who become subject to its regulation. We find them living a hurried and thoughtless life of hourly excitement, and shuddering at the possibility of a pause which could let in (to them the demon) reflection. We see them wanting the ordinary comforts of clothing and cleanliness, without home save that afforded by chance companionship. We find them in the brothel and the gin-shop, giving up to all manner of excesses, indulging in every extreme of vice, self-degraded and brutal. We see them corrupted and corrupting, initiating new candidates in the race of misery and dragging them in their own vortex to a death of infamy and horror. Where do we place them, and how do we treat them? They are taken to the bath and cleansed of outward pollution, they are new clad in warm and comfortable garments, they are placed in an apartment infinitely superior to what they have been accustomed, they are given employment to enable them to live by their own industry, they are addressed in the language of kindness, interest is shown in their present and future welfare, they are advised and urged to think of their former course and to avoid it, they are lifted gently from their state of humiliation; self-degradation is removed, and self esteem inducted. Pride of character and manliness is inculcated, and they go out of prison unknown as convicts, determined to wrestle for a living in the path of honesty and virtue. Is not this humane? The object of all prison establishments should be to reclaim. The separation of convicts affords facilities (which would be impossible under other circumstances) to treat each individual case in a manner best adapted to that result.—There are no doubt some criminals who are incorrigible, but even with these the vindictive feelings usually generated by prison discipline find no place, and they leave the establishment with sentiments of regard rather than resentment, toward those who have attempted to alter their vicious habits. We are unwilling to make any remarks which may appear invidious, but we ask that a single glance shall be taken at any of the other plans now in operation, and then let it be answered whether the Pennsylvania system does not possess distinctive features, which entirely change the relationship of prisoners towards society, and whether it does not embrace an extensive plan of amelioration of their condition? The nature of this report forbids a longer indulgence in this strain of remark, but it appears to us only to be necessary to turn the current of thought in the proper channel, and the real difference between this and all other known systems must be apparent.

In the prosecution of this system under the views here advanced, it must be obvious that care should be had in the selection of subordinate keepers; that the convict should not come in contact with minds and dispositions disqualified to inculcate good principles. A quiet and sober demeanor, an equable temper, and a consistency of conduct calculated to ensure respect, should be considered pre-requisite. All indulgence in low vices, impure conversation, gossiping or approach to familiarity with prisoners, should be traits of character to be avoided. The convict removed from his former associates should breathe none other than a moral atmosphere.

The Inspectors have still very much at heart, the intellectual and religious improvement of the prisoners, and would be much gratified if greater facilities than the law has yet provided for, could be granted. They are compelled to reiterate the request that the attention of the legislature should be called to that subject, as they believe that much could be effected without a great increase of expense. The opinions entertained and expressed in former reports remain unchanged on this subject; and a gratuitous performance of these services ought not to be expected from persons qualified for the task by such a government as ours. The Reverend Samuel W. Crawford, continues indefatigably and zealously to labor for the benefit of those under



our charge, and is entitled to the thanks of all who feel interested in the welfare of the establishment for the disinterestedness which he has displayed.

We refer to the report of the Physician herewith transmitted, for an account of the health of the Prison for the past year, exhibiting in a statistical form all the information necessary upon the subject, and establishing the fact by comparison with any other institution of like nature, that we have been peculiarly favored in that respect.

The report of the Building Committee herewith transmitted, contains an account of the progress of the work for the past year, and a statement of the amount of work, yet to be done to complete the Eastern Penitentiary. It is estimated that the sum of sixty thousand dollars will be required, and will be sufficient, to finish all the buildings necessary for the purposes of the Institution. We transmit the report of the Warden to the Board of Inspectors, to which we ask attention; as exhibiting some details of importance to obtaining a true knowledge of the Institution.

The usual statistical tables accompany this report in compliance with the law on that subject.

We also transmit a letter from the Architect to the Building Committee, being an useful paper, exhibiting a very detailed view of the work of the past year.

In conclusion the Inspectors beg leave respectfully to present to the Legislature, that the Institution labors under great disadvantages in procuring means necessary for its support, for the want of a sufficient capital to be employed in manufactures. This subject has been before submitted to the Legislature, and a committee of that body gave a statement concurrent with the opinion of the Board and urging the propriety of a law to that effect.

Signed,  
THOMAS BRADFORD, Jr.  
President.

WM. H. HOOD, Secretary.

#### WARDEN'S REPORT.

In presenting this my Sixth Annual Report to the Board of Inspectors, there appears little else to remark than what has in former years been brought to your notice.

From the nature of the law under which we act, we have been gradually increasing in numbers, and had on the 31st of December 1834, two hundred and eighteen prisoners; being sixty four more than we had at the corresponding date of last year.

No difficulties have occurred or obstacles been presented as our number has increased; but experience confirms the opinion expressed in former years of the efficacy, the superiority of the Pennsylvania system of prison discipline over all others. This is a pleasing subject of congratulation, and I think we may now cease to call our system of discipline an experiment, it having been more than five years in actual operation, and there being at present several prisoners who have from the period of their reception, nearly five years ago, been in close confinement without apparent injury to their mental or bodily health. It is also gratifying to be able to remark, that not only those who always have been the advocates of separate confinement are satisfied with its results, but many who heretofore entertained strong and honest fears of the effects of this kind of treatment. I believe all of the latter description who have had opportunities and have embraced them, of investigating for themselves, do fully acquiesce in its superiority. I am however aware that there are others with prejudices which may generally be traced to their interests; who profess not to approve of our system, and who are using every effort by writing and speaking, to give the public an unfavorable impression of its character. If these individuals would appear in

their own proper persons, their motives would be understood and little harm might arise. But so long as the views of interested agents continue to be given to the public year after year, in the reports of a highly respectable society, which derives most of its information from such suspicious sources, I fear that the general adoption of our improved system of discipline, may be prevented or at least seriously retarded. Certain it is, that their reports have for years gone to the world with unfair imputations and mistatement, calculated to give a most erroneous opinion of the results of the two different systems.

It is not my wish in this Annual Report to minutely contrast the efficacy of the Pennsylvania system with that of Ghent, or what is generally called the Auburn system, but it may not be improper to offer a few observations thereon.

The human heart revolts against oppression; it is soothed by kindness. Can any individual for a moment believe that the severe, nay even the brutal treatment which convicts have been and are subject to, will soften their hearts or in any way conduce to their reformation? and what is the great aim and end of every penitentiary system? Certainly the reformation of the prisoner is the all important point. Other prisons may boast of their earnings or gains and their surplus profits; ours was never expected to be a money making concern. But we have nevertheless the proud satisfaction of witnessing the salutary effects produced by it on many of the unfortunate inmates. Our treatment it is known is firm, yet mild and just. We endeavor to operate on their hearts and their feelings, not by lacerating their bodies, but by bringing them to a just sense of their own moral degradation. We endeavor to create anew within their bosoms the love of industry, of virtue and of piety.

To the philanthropist, to all who earnestly wish for the well being and improvement of society; to all who look forward to so desirable an end as the reformation of those deluded, misguided, miserable beings who are under our charge, I would exhibit fully and fairly the discipline of the institution; and ask them to examine thoroughly its condition and every branch of its operations; to view the convicts at their various employments, to witness their health, their cleanliness, their general cheerfulness, and with very few exceptions their willing industry: to learn from their own lips the manner in which they are treated by the Inspectors, the Warden and Officers: to ascertain from them their feelings towards those who have the immediate care of them, to speak to them of their future intentions, and in short to inquire minutely into the whole effect of the system on both body and mind. And should the same strict and severe scrutiny be made (if it were possible to obtain authority for that purpose) into the prisons of our sister states, I have no doubt of the nature of the impression that must be left on the mind of every unprejudiced, candid, intelligent man; and am bold to say that the result of such a comparison would be an award in our favor.

The Pennsylvania system is one of privations rather than punishments; such it certainly has been during the last year, for very few cases have occurred requiring severity of treatment; with an increased number of prisoners, we have had fewer cases of refractory conduct, than at any other period. This improvement I mainly attribute to the salutary change made in some of the under officers during the early part of the year. In all institutions it is important to have good officers, but in an establishment where the prisoners are kept separate and alone, particularly so; they have few opportunities for conversation and when these do occur they are embraced with avidity, and the temper, morals and disposition of those who have almost the exclusive communion with them must have great influence on the criminal. The improvement I have alluded to, has

therefore satisfied me that I was right in the changes that I made.

There were in the Penitentiary on the first of January 1834, one hundred and fifty-four prisoners, (152 males and 2 females) since then have been received 118. Discharged by expiration of sentence 41,—by pardon 8,\* and 5 have died; leaving on the 31st of December 1834, two hundred and seventeen males and one female.

All of the one hundred and eighteen received during the year, were males; seventy-six are white and forty-two colored.

Sixteen are under 20—sixty-three from 20 to 30—twenty-two from 30 to 40—ten from 40 to 50—six from 50 to 60—one from 60 to 70 years of age.

Fifty-nine are natives of Pennsylvania, four of New York, twelve of New Jersey, eight of Delaware, eight of Maryland, one of New Hampshire, one of Massachusetts, one of Maine, three of Connecticut, one of District of Columbia, two of Virginia, one of South Carolina, one of Ohio, one of Kentucky, five of England, seven of Ireland, two of Scotland and one of Germany.

On the first conviction, ninety-three—on second, twenty—on third, four—and on fifth, one.

Since the Penitentiary has been in operation, one hundred and four prisoners have been discharged; of this number only three have returned to this prison re-convicted, two of whom had served less than one year, and one two years.

Of the number received during the year, (118) twenty-five can neither read nor write—nineteen can read but not write—and seventy-four can read and write. Five were habitual drunkards—sixteen frequently intoxicated, seventy-three occasionally intoxicated, and twenty-four sober, who rarely drank ardent spirits. Thirteen were regularly bound and served out their apprenticeships—twenty-three were apprenticed and left their masters under various pretences—and eighty-two were never apprenticed; some lived with their parents, and others were hired out either by their friends or themselves.

The prisoners were employed on the 31st of December as follows: shoemaking department 83; spinning,

weaving, dying and dressing yarn 70; blacksmiths 6; carpenters 6; sewing 6; wheelwrights 2; washing 2; apothecary 1; turner 1; fireman 1; shuttle-maker 1; brush-making 1; tinman 1; cook 1; and 35 were idle, some of whom were sick and some recently arrived.

It was hoped that the Legislature of the last year would have appropriated a sum of money as a capital to be invested in our manufacturing department, particularly as a committee of the House of Representatives who came and examined into the various branches advised it in their report. We have, and must continue to labor under serious loss and great disadvantage for want of capital; and therefore cannot compete with other institutions who have their forty, fifty, and some upwards of one hundred thousand dollars capital. Had this grant been made, a different result in our pecuniary affairs would have been shown. It is very desirable that the Legislature should grant not only a sufficient sum to enable us to properly conduct our manufacturing, but also to complete the whole establishment in buildings and machinery; as the system cannot be conducted satisfactorily until this is done, and all the workmen are out of the yard.

We have cells completed for 311 prisoners. We must expect to receive from the respective counties in the Eastern District during the year 1835, at least 140 prisoners. It is expected that the new County Prison will be finished and be ready to receive prisoners by the first of July, when those in the Walnut street prison sentenced to the County Prison will be removed there, and we must be ready to receive the remainder. On examination it is found, that there will be at that date 162, who were sentenced under the act of 28th March 1831, and who must upon the breaking up of the Walnut street Prison, be received agreeably to the tenor of their sentences into this Penitentiary. These with the 140 to be received, and 218 the number we had on the 1st of January 1835, would give us 520; from this must be deducted those discharged during the year, which will probably be about 100, and thus leave us on the 1st January 1836, 420 prisoners; being 109 more than we have accommodations finished for. Hence the great necessity for an early appropriation to enable us to complete the cells.

Signed,  
SAMUEL R. WOOD,  
Warden.

12th mo. 31st, 1834.

\* These were all pardoned by the recommendation of their friends, and not by the Inspectors.

### PHYSICIAN'S REPORT.

To the Board of Inspectors of the Eastern Penitentiary, the Physician respectfully presents his Annual Report for 1834.

The number of cases of disease occurring this year has been greater, in proportion to the number of prisoners, than in any former year since the opening of the Penitentiary. The increase of disease was confined chiefly to July and August; during which months, in consequence probably of the extreme heat of the weather, a large proportion of febrile cases occurred. Notwithstanding the greater amount of sickness, the mortality for the year has been moderate.

The following table gives a view of the state of health on admission and discharge of the forty-eight prisoners who left the Penitentiary within the year.

*No. of Prisoners. | State of Health on Admission. | Length of confinement. | State of Health on Discharge.*

109	Affected with Syphilis.	2 years.	Improved.
150	Good.	1 year.	Doubtful.
196	Insane.	2 m. & 21 days.	Insane.
156	Good.	1 year.	Good.
116	Affected with Syphilis.	2 years.	Affected with Chronic Cough.
160	Good.	1 year.	Good.
161	Good.	1	Good.
67	Good.	3	Imperfect.

*No. of Prisoners. | State of Health on Admission. | Length of confinement. | State of Health on Discharge.*

119	Good.	2 years.	Good.
73	Good.	3 "	Apparently good.
123	Good.	2 "	Good.
124	Good.	2 "	Deteriorated.
172	Good.	1 "	Good.
162	Good, except Fits.	13 months.	Good.
193	Weak and imperfect.	8 "	Good.
104	Affected with cold in the head.*	2½ years.	Insane.
130	Good.	2 "	Good.
76	Imperfect.	3 "	Good.
187	Good.	1 "	Good.
36	Good.	4 "	Good.
189	Subject to Rheumatism.	1 "	Good.
135	Good.	2 "	Recovering from Fever.
28	Good.	4 "	Recovering from mild Fever.
133	Good.	2 "	Good.
136	Mind excited and incoherent.	1 yr. & 11 mont.	Mind same. Affd. with chronic dis-
87	Good.	3 years.	ease of the Lungs.
190	Ulcer on the Leg.	1 year.	Affected with Scrofula & Scurvy.
227	Good.	8 months.	Good.
273	Good.	25 days.	Good.
243	Good.	5 months.	Good.
78	Good.	3 yrs. & 3 month.	Good.
89	Subject to Rheumatism.	3 yrs. & 21 days.	Improved.
137	Good.	2 years.	Good.
138	Good.	2 "	Subject to Fits.
46	Good.	4 "	Improved.
194	Good.	1 year.	Improved.
95	Good.	3 years.	Affected with slight temporary
96	Good.	3 "	Good. [Indisposition.
141	Good.	2 "	Improved.
213	Subject to Fits.	1 year.	Affected with debility.
140	Good.	2 years.	Improved.
103	Good.	3 "	Improved.
177	Imperfect.	18 months.	Improved.
143	Just recovered from fever.	2 years.	Good.
105	Imperfect.	3 "	Good.
178	Good.	18 months.	Improved.
107	Good.	3 years.	Improved.
108	Imperfect.	3 "	Improved.

The facts contained in the above table shew, that the confinement in this Penitentiary is not unfavorable, as a general rule, to the health of the prisoners.

The following table presents a list of the fatal cases which have occurred within the year.

<i>No. of Prisoners.</i>	<i>State of Health on Admission, extracted from Medical Journal.</i>	<i>Date of Decease.</i>	<i>Length of confinement.</i>	<i>Disease.</i>
148	Imperfect. Visceral obstructions.	Feb. 13.	13 months.	Palsy.
165	Good.	Aug. 4.	15 "	Pulmonary Consumption.
230	Imperfect.	" "	6 "	Dropsy of the Chest.
219	Poor, affected with Asthma.	Sept 13.	8½ "	Remittent Fever.
232	Affected with bad Cough.	Oct. 25.	8 "	Pulmonary Consumption.

It is worthy of remark, that four out of the five fatal cases, occurred in prisoners who entered the Penitentiary in a diseased state, and that the deaths in all the cases took place after short periods of confinement.

For the number and character of the various cases which have occurred throughout the year, the Inspectors are referred to the accompanying Tabular View, from which it appears that the most sickly months for this year have been July, August, and December, and the most prevalent diseases, Fevers, Affections of the Bowels, Catarrhs, and Rheumatism.

The average number of prisoners in confinement during the year, has been 183; the deaths having been five, gives the mortality for this year, at two and seven-tenths per cent.

The average annual mortality, deduced from the four years ending with 1833, as stated in the last annual report, was three and two-tenths per cent. The average of 1834, being two and seven-tenths per cent. gives the average mortality for the five years ending with 1834, at two and nine-tenths per cent.

All which is respectfully submitted.

FRANKLIN BACHE, M. D.  
Physician, E. P.

December 31, 1834.

\* This was the note in the Medical Journal on Admission; but it has been satisfactorily ascertained that this prisoner behaved in an insane manner previous to his conviction.

TABULAR VIEW OF MEDICAL CASES OCCURRING IN THE EASTERN PENITENTIARY, FOR THE YEAR 1834.

DISEASES.	Remaining Jan. 1, 1834.											
	January,	February,	March,	April,	May,	June,	July,	August,	September,	October,	November,	December,
Fever.	2	3	2	1	1	1	1	1	1	1	1	1
Intermittent Fever.	1	1	1	1	1	1	1	1	1	1	1	1
Remittent Fever.	1	1	1	1	1	1	1	1	1	1	1	1
Difficulty of Breathing.	1	1	1	1	1	1	1	1	1	1	1	1
Quinsy.	1	1	1	1	1	1	1	1	1	1	1	1
Catarrh.	1	1	1	1	1	1	1	1	1	1	1	1
Pleurisy.	1	1	1	1	1	1	1	1	1	1	1	1
Chronic Inflammation of the Lungs.	1	1	1	1	1	1	1	1	1	1	1	1
Dropsy of the Chest.	1	1	1	1	1	1	1	1	1	1	1	1
Pulmonary Consumption.	1	1	1	1	1	1	1	1	1	1	1	1
Cholera Morbus.	1	1	1	1	1	1	1	1	1	1	1	1
Cholic.	1	1	1	1	1	1	1	1	1	1	1	1
Dysentery.	1	1	1	1	1	1	1	1	1	1	1	1
Diarrhœa.	1	1	1	1	1	1	1	1	1	1	1	1
Dyspepsia.	1	1	1	1	1	1	1	1	1	1	1	1
Headach.	1	1	1	1	1	1	1	1	1	1	1	1
Vertigo.	1	1	1	1	1	1	1	1	1	1	1	1
Palsy.	1	1	1	1	1	1	1	1	1	1	1	1
Epilepsy.	1	1	1	1	1	1	1	1	1	1	1	1
Mania.	1	1	1	1	1	1	1	1	1	1	1	1
Inflammation of the Eyes.	1	1	1	1	1	1	1	1	1	1	1	1
Inflammation of the Stomach.	1	1	1	1	1	1	1	1	1	1	1	1
Inflammation of the Liver.	1	1	1	1	1	1	1	1	1	1	1	1
Rheumatism.	1	1	1	1	1	1	1	1	1	1	1	1
Scrofula.	1	1	1	1	1	1	1	1	1	1	1	1
Scurvy.	1	1	1	1	1	1	1	1	1	1	1	1
Dysuria.	1	1	1	1	1	1	1	1	1	1	1	1
Hemorrhoids.	1	1	1	1	1	1	1	1	1	1	1	1
Debility.	1	1	1	1	1	1	1	1	1	1	1	1
Worms.	1	1	1	1	1	1	1	1	1	1	1	1
Small Pox.	1	1	1	1	1	1	1	1	1	1	1	1
Eruptions.	1	1	1	1	1	1	1	1	1	1	1	1
Wound.	1	1	1	1	1	1	1	1	1	1	1	1
Abscess.	1	1	1	1	1	1	1	1	1	1	1	1
Ulcer.	1	1	1	1	1	1	1	1	1	1	1	1
Fistula.	1	1	1	1	1	1	1	1	1	1	1	1
Number of Cases in each month.	10	10	10	10	10	10	10	10	10	10	10	10
Number of Deaths in each month.	7	7	7	7	7	7	7	7	7	7	7	7

FRANKLIN BACHE, M. D. Physician, E. P.

Total number of Prisoners received since the admission of the first prisoner, Oct. 22, 1829—

Discharged by expiration of sentence, 80

Discharged by pardon, 16

Died, 15

Leaving, January 1, 1835,

AGES.	
Under 20 years,	45
From 20 to 30,	169
30 to 40,	72
40 to 50,	42
50 to 60,	14
60 to 70,	3
70 to 80,	2

COLOUR.	
White males,	238
Coloured males,	95
Coloured females,	4

NATIVES OF—

Pennsylvania,	154
New Jersey,	31
Delaware,	25
New York,	22
Maryland,	22
Connecticut,	9
Virginia,	5
Massachusetts,	3
South Carolina,	2
Ohio,	2
North Carolina,	1
Tennessee,	1
Kentucky,	1
Rhode Island,	1

Carried up, 279

NATIVES OF—

Brought up,	279
Vermont,	1
Mississippi,	1
New Hampshire,	1
Maine,	1
Dist. of Columbia,	1
Ireland,	27
England,	15
Scotland,	3
France,	2
Germany,	2
Holland,	1
Switzerland,	1
Netherlands,	1
Denmark,	1

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## CRIMES.

Larceny,	79
Horse Stealing,	66
Burglary,	65
Forgery,	25
Manslaughter,	13
Passing Counterfeit money,	13
Murder,	13
Robbery,	12
Rape,	4
Arson,	4
Assault and Battery with intent to kill,	5
Assault and Battery, intent to commit rape,	3
Selling Counterfeit Money,	2
Horse Stealing and Larceny,	2
Perjury,	2
Highway Robbery,	2
Sending a challenge to fight with deadly weapons,	1
Receiving Stolen Goods,	1
Stealing the Mail,	1
Burglary and Larceny,	1
Felony,	1
Subornation of Perjury,	1
Unnatural Crime,	1
Robbing U. S. Mail,	1
Assault and Battery, with intent to produce Abortion,	1
	<hr/> 357

## HABITS.

Habitual Drunkards,	25
Frequently Intoxicated,	65
Occasionally Intoxicated,	157
Sober,	80
Uncertain,	10
	<hr/> 337

## EDUCATION.

Cannot read or write,	67
Can read but not write,	78
Can read and write,*	192
	<hr/> 337

## NUMBER OF CONVICTIONS.

On First,	259
Second,	45
Third,	20
Fourth,	6
Fifth,	3
Sixth;	4
	<hr/> †337
Of the whole number, there were apprenticed and regularly served out their time,	43
Apprenticed and left their masters under various pretences,	61
Lived with their parents, or were hired out during their minority, (a very large proportion hired out)	233
	<hr/> 337

\* Of this class, 1 had been educated at a University; 1 had a good English Education, and is a tolerable Latin and French scholar; 1 understands English, Dutch, and Hebrew; 15 have had a good English education; and the remainder could but read and write indifferently.

† Only 3 of these have been re-convicted to this Penitentiary, all the other convictions have been to other prisons.

## COLUMBIA AND PHILADELPHIA RAIL WAY.

## No. 1.

Report of William B. Mitchell, Superintendent.

TO JAMES CLARK, Esq.

*President of the Board of Canal Commissioners.*

Sir:—At the date of my last annual report, it was considered merely possible to render the first track of the Columbia rail way passable by the first day of January last. The fears then entertained were unfortunately realized, and the want of a sufficient quantity of iron, together with the unfavorable season of the year for prosecuting works of this kind, prevented the accomplishment of my wishes; and it was not until the sixteenth of April that the first track was in a situation to admit the public use of it. Since that time it has been in continual operation. The second track was opened on the seventh of October: and all the work connected with the laying of the tracks from Columbia to Philadelphia, may now be considered as complete.

The only works of consequence originally designed, and yet unfinished, are the depots and work-shops at the two inclined planes, a collector's office at Downingtown, the connection with the Columbia bridge, and a few farm bridges. There are some additional works believed to be necessary, which are mentioned in the report of the engineer, and, if approved by the Legislature, will require an additional appropriation for their construction. These are, side tracks near the city of Philadelphia, the roofing of the inclined planes, and a house and lot for a collector's office in Broad street.

The amount of business done upon the rail way since it has been in use has not equalled the expectations which I entertained in the early part of the year. The causes which produced the failure are obvious, and must shortly cease. After the completion of the first track, the difficulties experienced in using it were great: The contractors who were at work on the second track, had no other means of transporting their materials but by using the one already completed; and this, together with the transporting of iron, occasioned so many obstructions in the use of a single track, as to deter many, who would otherwise have made preparations for operating upon it, from making the attempt under these discouraging circumstances. Another reason operated to lessen the amount of tolls received: after the second track was completed, and a portion of the full trade might have been expected, a want of locomotives on the rail way, and a line or lines of boats from Columbia upon the canal, westward, confined the operations upon the rail way entirely to travelling and the local trade of the country through which it passes.

The doubts which have heretofore been entertained of the practicability of using locomotives successfully upon a rail way having such high grades and severe curves as those on the Columbia road, have been completely dispelled; and the limited experience which we have had in the use of locomotives, affords conclusive evidence of the fact that they are the only efficient power which can be employed on a rail way adapted to their use.

The structure of the rail way itself may be considered as among the most substantial and permanent works of the kind in the country. Several of the bridges, however, having been constructed with a view of accommodating horse-power only, are not so well adapted for locomotives as is desirable.

*The expenses of the past year may be classed in the following manner:*

For materials and workmanship in laying track on sixty miles of rail way, and grading at gap,

\$730,309 46

Rail way bridges,	69,327 78
Road and farm bridges,	7,560 58
Stationary engines and buildings,	43,111 24
Depots,	10,465 00
Collectors' offices and toll house,	9,520 43
Connexion with Columbia bridge,	4,060 00
Fence estimates,	672 48
Water stations,	2,550 00
Jobs and repairs,	11,539 71
Engineering, &c.	35,934 10
Locomotive engines,	20,080 04
Cost of iron, transportation and incidental expenses,	536,480 35
Turnouts,	18,145 41
<b>Expenditures of the past year,</b>	<b>\$1,499,736 58</b>
Estimates and accounts remaining unpaid,	45,000 00
	<b>\$1,544,736 58</b>
Balance remaining at last year's report,	\$701,301 33
Appropriation of 1834,	804,900 00
	<b>1,506,201 33</b>
Deficiency,	<b>\$38,535 25</b>

*Estimated expense for ensuing year.*

Eighteen locomotive engines and tenders, complete,	\$113,400 00
Depots, work shops and side tracks,	8,700 00
Tools and machinery,	5,500 00
Water stations,	2,550 00
Sheds and stabling,	7,000 00
Expenses of locomotive and horse power,	76,260 00
Dwellings for workmen at the depots,	5,000 00
Expenses of stationary engines,	10,000 00
Amount required to complete works now in progress,	30,000 00
For contingent and unforeseen expenses,	11,170 00
	<b>269,580 00</b>
Deficiency,	<b>38,535 25</b>
	<b>308,135 25</b>
Fuel, oil, &c. for stationary engines in stock for the current year,	1,800 00
Total amount required to complete the work in progress, stock the road with locomotive engines, and defray the expenses, for the current year,	<b>306,335 25</b>

If it should be deemed expedient to erect a collector's office in Broad street, construct extra tracks near the city of Philadelphia, cover the inclined planes, and grade a road from the Schuylkill bridge to the head of the plane, an additional sum of thirty five thousand six hundred dollars will be required.

In the appropriation of last year, no provision was made for the purchase of locomotive engines, or for the expense of using the stationary and motive power.—These expenses have been heavy and unavoidable, and

together with the repairs on the Eastern twenty-two miles, up to the first of June, and the cost of other items which could not have been foreseen at the date of the last Annual Report of the Engineer, make up within a small sum the deficiency of the Estimate which accompanied my last report. It is certainly a matter of unusual occurrence, that the estimate of an Engineer for the expenditure of more than one and a half millions of dollars, and constituted of many items of doubtful cost, should be found to be within a few thousand dollars of the actual cost of the work when completed. The revenue to be derived from this improvement for the current year, must depend, in a great measure, upon the prompt action of the Legislature in making an appropriation for the purchase of Locomotive engines.—Arrangements have been made with the most experienced engine builders in this country, for six engines by the first of March next, and four others are expected from England in the course of the winter. These will be sufficient to accommodate the spring trade, and develop the advantages which will result to the Commonwealth, from the construction of this rail way; should the Legislature fail to make prompt provision for the engines, as they are turned out of the workshops, it will have the effect of checking the operations of those concerned in building them—for although experience has convinced us that we have mechanics at home who can make an engine equal, if not superior to those brought from abroad, and at as cheap a rate; yet they have not capital to expend in the construction of a number of these expensive machines, without meeting a cash market for them as soon as they are delivered. It is therefore a matter of the utmost importance to the interest of the State, that provision be made at as early a period of the session as practicable, for the payment of locomotives as fast as they can be constructed; and as evidence of the necessity of this measure, I can assert the fact that if we had now the means of transporting all of the local trade which requires to be sent to market, the amount of tolls on this rail way would be trebled. Hence the necessity of providing in due time for the spring trade upon the Canals. If this trade is promptly met at the opening of the Canals, there can be but little doubt that the tolls which will be received in the current year, will remunerate the Commonwealth for the payment of interest on the amount expended in constructing the rail way, in addition to the benefits conferred upon the community by the increased facilities of travelling and transportation. The favorable locality of the Columbia rail way, by which the greater portion of the trade to and from the west, carried upon the State Canals, must pass over it, can scarcely fail in a short time, of making it one of the most productive improvements in the State.

The annexed tables, and the report of the engineer, will exhibit the operations of the past year in detail.

Respectfully submitted,

W. B. MITCHELL,

Superintendent Columbia rail way.

Rail way Office,  
Lancaster, Nov. 13th, 1834. }

No. 2.

Columbia and Philadelphia rail way.

<i>Contractors.</i>	<i>Kind of work.</i>	<i>Amount estimated.</i>	<i>Amount paid within current year.</i>
William M'Connell,	Turnouts,	\$22,462 26	18,145 41
Waters & North,	Water stations,	5,500 00	2,550 00.

Robert Strain,	Jobs & Repairs,	6,136 08	6,136 08
John Pugh,	do do	2,785 05	2,785 05
Thomas Wallace,	do do	1,312 85	1,312 85
William North,	do do	1,305 73	1,305 73
			<hr/> \$11,539 71

A. & G. Ralston, paid them for rail way iron,	\$427,932 90
Paid sundry persons for transporting rail way iron, machinery, &c.	76,470 02½
Sundry persons for castings,	10,373 71
Repairing engines and tenders,	227 57
Canvass, lumber, and other materials,	2,395 28
Repairing bridges,	1,726 70
Water tanks,	826 53
Fuel, oil, &c. for locomotive and stationary engines,	3,522 60
Ropes for inclined planes,	4,477 52
Laying track near Schuylkill bridge, swivels, and other mechanical jobs,	6,037 17
Rent of warehouses, offices, storing iron, printing, stationary, &c.	1,735 10
Cars, and tools for workshops,	755 25
Paid for locomotive engines,	20,080 04
Engineering, and incidental expenses,	35,934 10
<hr/> \$592,494 49½	

## No. 3.

Report of E. F. Gay, Engineer.

Engineer Department, }  
 Lancaster, Nov. 7th 1834. }

To WM. B. MITCHELL, Esq.

Superintendent of the Columbia  
 and Philadelpha rail way.

Sir—In presenting you my second annual report on the situation of the Columbia and Philadelphia rail way, it affords me great pleasure that I am able to congratulate you on the successful completion of both the main tracks within the past year. The first track was opened for public use on the 16th of April, and the second on the 7th of October.

As some work remains to be done on the line, for the accommodation of the trade, and as steam has been adopted as the principal motive power, I propose in this report to refer, first, to the construction of the rail way, and, secondly, to the motive power.

## CONSTRUCTION.

The only works at present in progress, and necessary to complete the rail way, are—a double track along the east side of the Columbia basin; some embankment and track to connect with the river bridge at Columbus; a collector's office at Downingtown, with addition to the office at Lancaster; three pair of weigh scales; two bridges, and a system of turnouts and sidings: all of which (the collector's office at Downingtown excepted) will probably be completed by the latter end of next month (December.)

A public siding, about one thousand feet in length, is much wanted on each side of the main line, extending west from Broad street, in the city of Philadelphia, for the accommodation of individuals who are desirous of intersecting the road with lateral tracks. Applications are frequently being made for permission to put in turnouts near the city; and unless the siding above alluded to shall be constructed by the State, the frequency of the turnout castings, placed in the main track by individuals, will prove a fruitful source of annoyance to the regular travelling, as well as destruction to ear wheels.

In consequence of a heavy expense having been incurred by the state, in the construction of a carriage-way connected with the Schuylkill viaduct, I would

recommend that a road should be extended parallel to the rail way, from the west end of the bridge to the head of the inclined plane. By this improvement, the populous district of country adjacent to the head of the plane would have opened for its accommodation the nearest road to Philadelphia, and the bridge would, without doubt, soon become a valuable source of revenue.

I would also recommend the construction of sheds to cover the entire length of the Schuylkill and Columbia planes, which would add materially to the durability of the ropes, would ensure greater regularity in passing the planes at all seasons of the year, would render the signals used more certain, and would afford additional safety to the multitude of passengers that travel the road, the number of which is daily increasing.

The estimated cost of two sheds is \$25,000. The usual durability of ropes on inclined planes, when exposed to the weather, averages about *one year*. If the planes are covered, the ropes may be safely trusted for two years. This being the case, the subject, in a pecuniary point of view, would stand as follows:

Present annual cost of ropes for two planes,	\$3,300 00
Estimated cost, with sheds,	1,650 00
Annual difference,	\$1,650 00
Interest on sheds at six per cent,	1,500 00
Cost in favor of sheds,	<hr/> \$150 00

There being but two planes on this rail way, the immense amount of trade and travel, that may reasonably be expected on it, would seem to require that every facility should be afforded, for a safe and easy transit, which circumstances will allow of.

The present residence of the collector at Philadelphia having been erected with a view of accommodating a weigh-master, and as the appointment of that officer will soon be necessary, I would suggest the propriety of making arrangements for the permanent location of the collector's office in Broad street. This street is admirably calculated for the accommodation of an extensive rail way business; and as the principal depots for trade are, and probably will be for several years, to come, erected on it, the contiguity of the collector's office would materially facilitate the transaction of business, and ensure regularity in the starting of the trains.

Should the cost of the work under contract be found to exceed the estimate of last year, it is wholly attributable to an unexpected increase in the difficulties at the *gap section*, which were met with subsequent to my last report; to the necessity of resorting to distant springs for an additional supply of water for the Schuylkill stationary engine; to a change in the location and plan of connection with the Columbia bridge, and to the extra cost of hauling a large portion of the rail way iron with horses, instead of locomotive engines, as had been anticipated in my former estimate.

The following estimate comprises the amount of work in progress and necessary to finish the line:

Extension of double track of rail way along east side of the Columbia basin, inclusive of grading street, putting in swivels, and completing the connection with the Columbia bridge,	\$ 7,700 00
Turnouts and sidings,	11,950 00
Weigh scales and collector's offices,	3,100 00
Farm bridges and fencing,	2,250 00
	\$25,000 00
Add for contingent expenses,	5,000 00
Amount required,	\$30,000 00

The following is an estimate of the works recommended in the preceding report, but not in progress:

Sidings, west of Broad street, (double track,)	\$ 2,100 00
Road from Schuylkill bridge to head of plane,	2,500 00
Covering two inclined planes,	25,000 00
Collector's office in Broad street, Philadelphia,	6,000 00
Total,	\$35,600 00

#### Motive Power.

In reference to this subject, I have to inform you, that the experience of the past year has proven the sentiments expressed in my last annual report *to be correct*, in almost every particular.

The trade on this road cannot possibly be accomplished by a promiscuous use of horses, as no system of regulations can be enforced, so as to prevent the repeated and vexatious interruptions consequent upon travelling on a rail way, with horses, at different degrees of velocity, to suit the different interests of individuals using it. And I have no hesitation in asserting, that the *plan* proposed in my last report, viz: "Steam as a motive power, furnished by the Commonwealth, allowing individuals to furnish cars, and attach to the engine under proper regulations," will be found the only effectual one to accommodate the wants of the public.

Of the fifteen engines authorized to be procured for the road by the resolution of the Board of Canal Commissioners, *two* have been completed, viz: The "*Lancaster*," and "*Columbia*," and are in daily use.

The engine "*Lancaster*," was placed on the road and commenced running on the 28th of June, since which time, it has hauled a large portion of the iron required for the second track, and has latterly been employed in the transportation of freight.

The trips of this engine have been performed with great regularity, seldom being detained, except by repairs necessary to the tenders or train.—The very few accidents which have occurred, were not of a serious nature, and are wholly attributable to the use of a single track, and to other causes which will be entirely removed whenever the horses are withdrawn from the line, and steam being alone used, shall travel in opposite directions, on separate tracks.

The engine "*Columbia*," commenced running on the

10th of September, and although it did not at first appear as perfect as was desired, yet it is now in excellent order, and its performance is highly satisfactory; indeed these engines are justly considered superior and beautiful specimens of mechanism, and reflect great credit on the ingenious mechanic (M. W. Baldwin, Esq., of Philadelphia,) who constructed them. They are each supported on six wheels, which is found to be the only arrangement that will enable a locomotive engine to overcome the severe curves, connected with the high grades upon this road, without injury to the engine or rail way. A *third* engine is expected from the establishment of Mr. Baldwin, during the present month, and *three* others, within the next three ensuing months.

Four engines from the establishment of Mr. Stephenson (England,) are engaged to be on the road on or before the 1st of March next, and also *two* from the Messrs. Sellers of Philadelphia, about the same time; in all 10 engines, (in addition to the two on the road,) are in preparation to be ready for running on the road, on or about the 1st of March next. The balance to be finished by the 1st of June.

As all the engines preparing for the road are designed to be of the same class, the following statement of the capacity of the "*Lancaster*," may be applied to the others.

Weight of the engine, eight tons; capable of drawing thirty-six tons exclusive of cars, say fifty-six tons gross. Amount taken at each load *limited* at thirty tons, or about forty-eight tons gross. Running time, between the inclined planes, (seventy-seven miles,) with the above loads, *eight hours*, including stoppages.

#### Expenses of one trip.

20 bushels of coke, at 20 cents,	\$4 00
1½ cords of wood at \$4,	6 00
Engineer and attendants,	4 00
Oil,	60
Total,	\$14 60

If to the above is added the *estimated* value of horse power to and from the foot of the planes, and attendance at water stations,

2 40

The actual expense of motive power for a train of cars from Columbia to Philadelphia, will stand

\$17 00

Annexed is an estimate of the expenses of the stationary engines and attendance at the inclined planes:

#### Schuylkill Plane.

Anthracite coal, 1½ tons per day,	\$6 25
Wood, 1-6 of a cord "	70
Oil and attendants, "	9 05
	\$16 00

#### Columbia Plane.

Anthracite coal, one ton per day,	\$5 00
Wood, 1-7 of a cord "	55
Oil and attendants "	7 95
	13 50

Expenses of both planes,

\$29 50

Extensive arrangements are now being made along the line by individuals, who purpose to make an active use of the road during the ensuing year; and when the local trade of the populous and fertile country through which this rail way passes, together with the great increase of travelling, and the immense amount of transportation between Philadelphia and Pittsburg are taken into consideration, it must appear obvious that preparations for motive power to accommodate the extensive business anticipated, should be made with the least possible delay, and that to a free and perfect use



of the road, such preparations should always be in advance of real want.

With this view of the subject, I have estimated twenty locomotive engines as being requisite to accommodate the trade and travel for the ensuing year, (1835.) The arrangement of their occupation will vary according to circumstances, but will probably be nearly as follows:

The whole number of engines,	20
Engaged in hauling western trade,	8
Do. do. passengers,	4
Do. do. local trade,	3
	— 15
Engines on hand to supply deficiencies,	5

The depots and workshops at the Schuylkill and Columbia inclined planes, and the water stations along the line, are all in a forward condition, and will be finished early in December. The cost of the depots will be increased beyond the estimate of last year, in consequence of their having been constructed *fire proof*, and enlarged so as to accommodate a greater number of engines than was *then* contemplated. The number of water stations has also been increased, to suit the wants of the engines.

I would here remark, that the *plan* suggested in my report of the last year, viz: "that individuals using the road should make their own arrangements for taking their cars to and from the foot of the planes," has been found, by the experience of the past season, to be defective; as all persons who casually use the road, and cannot therefore afford to keep horses at each end of the line, are left at the foot of the planes without the means of proceeding further, which produces delays that interfere seriously with the regularity necessary to be observed in the passage of the trains. To remedy this difficulty, engagements have been made with individuals, on behalf of the Commonwealth, to furnish horses and haul to and from the foot of the planes, all the cars which form the *trains* of the engines.

This plan has been in operation since the 20th September, and is found fully to answer the purpose desired. Owing to the limited number of cars now conveyed, as forming but the single train of an engine *each way* per day, no price has yet been fixed on for the labour of the horses; neither can any arrangement be satisfactorily made until locomotive engines are exclusively used between the inclined planes, when the entire use of the road may be reduced to a *correct*, and, I may add, *perfect system*.

The erection of stables at the foot of the inclined planes and each extremity of the line, and also sheds at four different points on the road, for the reception of engines with their trains stopping over night, together with a building for the accommodation of a spare engine at *Parke's station*, (being a central position,) are considered indispensably necessary, and accordingly included in the estimate.

The following is an estimate of the amount required to furnish the motive power, (exclusive of engines delivered and work done,) together with its expenses for the ensuing year:

Eighteen locomotive engines and tenders, complete, at \$6,300 each,	\$113,400 00
Depots, workshops and side tracks,	8,700 00
Tools and machinery,	5,500 00
Water stations,	2,550 00
Sheds and stabling,	7,600 00
Expenses of locomotive and horse power,	76,260 00
Dwellings for workmen at the depots,	5,000 00
Expenses of stationary engines,	10,000 00

229,410 00

Add for contingent and unforeseen expenses,	11,170 00
Amount required for motive power,	239,580 00
Add amount required for construction,	30,000 00
Whole amount required to finish,	\$269,580 00
Should the collector's office and siding at Broad street, covering the planes and making the road along <i>side</i> be authorized, the amount required will be	\$305,180 00

Notwithstanding the large amount required to stock this road, it is confidently believed that if *early arrangements* should be made to meet the wants of the public, the value of the *rail way*, as a source of revenue, will fully realize the most sanguine expectations of its friends.

Very respectfully submitted.

EDW. F. GAY, Engineer,

STATEMENT OF THE BANK OF THE UNITED STATES.

From the year 1831 to 1835, inclusive.

	<i>Loans.</i>	<i>Bills.</i>	<i>Totals.</i>
1835, April 1,	57,173,747 75	2,926,468 96	60,100,216 71
1834, " "	36,130,141 96	18,676,675 66	54,806,817 62
1833, " "	41,574,206 29	22,749,723 50	64,323,929 79
1832, " "	48,449,592 95	21,481,100 50	69,930,693 54
1831, " "	43,742,438 32	14,725,923 30	58,468,360 62
	<i>Funds in Europe.</i>	<i>Specie.</i>	<i>Net Circulation.</i>
1835, April 1,	Due to Bank, 2,421,354 90		20,544,736 90
1834, " "	Due to Bank, 2,955,090 76	16,448,814 86	17,521,264 39
1833, " "	Due to Bank, 3,942,019 53	10,180,608 70	18,033,205 40
1832, " "	Due by Bank, 1,687,565 79	9,001,661 93	21,360,465 00
1831, " "	Due to Bank, 180,339 86	7,029,310 61	18,238,492 00

PENNSYLVANIA AND OHIO CANAL.

The Directors of the Board of Trade, observe with great satisfaction, that books are to be opened in this city, on the 27th instant, for subscriptions to the capital stock of the Pennsylvania and Ohio Canal Company, under the very liberal charter granted by the two States, for the purpose of connecting the great Canals of Ohio and Pennsylvania, by a canal along the Valley of the Mahoning to intersect the Ohio Canal, at or near Akron. A work which has engaged the attention of the Board of Trade since its organization, and which, on several occasions, they have urged upon the attention of our Legislature and citizens, as an improvement of vital importance to the State and City. And now

that the construction of this valuable improvement is placed within our power, the Board would again press its claims upon the attention of the Commercial and landed interests of our city, and upon all who desire to secure to Pennsylvania and Philadelphia, the trade of Ohio, the Upper Lakes, and the Illinois and Indiana Canals, which lead to these Lakes. Therefore

Resolved, That the Directors of the Board of Trade continue to entertain undiminished confidence in the advantages of a connection with the Ohio Canal, by the route of the Mahoning Valley, and of the important benefits which must result to the trade and commerce of our State and City.

Resolved, That this Board recommend to their fellow citizens, to secure the speedy construction of the said Canal, by promptly filling up the stock on the opening of the books.

THOS. P. COPE, President.

J. M. WRIGHT, Secretary.

April 25.

#### SELF ACTING SAFETY BRAKE FOR CARS AND COACHES ON RAIL ROADS.

This is a brake constructed on a new plan, intended to afford additional security to rail road travelling, by Mr. Juhn K. Smith of Port Clinton. We have had, in our office for a day or two, a beautiful model as well of the Brake aforesaid, as of a Rail Road Car, to the front part of which a Brake is also attached, intended to take effect immediately upon collision. Both the Car and Brake are very handsome specimens of mechanism and reflect credit on the artificers, Messrs. Beller & Bargontz, of Hamburg, Berks county. "An examination of the model of the Safety Brake, in the language of Mr. Smith, shows that when the impelling machine is impeded either by design or accident, the cars will follow one another, until all the Brakes in the train take effect—by a close examination it will be seen that before the cars come in contact, the Brakes must take effect on the wheels, and, therefore only in cases of very great velocity, and sudden stoppages, the cars can strike with any great force against each other."—The aforesaid models will shortly, we understand, be exhibited at the Philadelphia Exchange. We do not profess to be competent to express any opinion concerning the merits of these inventions—they will be submitted to the public, who will then be enabled to judge of their advantages.—*Miners' Journal*, May 2.

#### BANK DIVIDENDS.

The Dividends of the Banks for the last six months are unusually heavy. We subjoin an account of them, as far as they have been received. We ought perhaps to mention, that only a part of the banks make dividends in May and November; the others generally divide in January and July.

Mechanics' Bank,	6 per cent.
Farmers and Mechanics' Bank,	4
Commercial	4½
Girard	4
Kensington,	5
Southwark	5
Schuylkill	3½
Western	5
Manufac. & Mechanics'	4
Northern Liberties	6
Philadelphia	3
Farmers' (Bristol)	4
Frankford and Bristol Road,	\$1 pr. share.
	<i>U. S. Gazette.</i>

MILTON May 2.

Snow.—On Monday night and Tuesday morning we had a considerable fall of snow. It lay upon the ground in this quarter about 2½ inches deep—and in the Muncy hills, we are told, it lay six inches deep.—We have now great fears for the little prospect we had of fruit.

From the Philadelphia Gazette.

#### PROCEEDINGS OF COUNCILS.

Thursday Evening, April 30th, 1835.

#### SELECT COUNCIL.

Mr. Price, from the committee on public clocks, made the annexed report, the resolution attached to which was adopted, and concurred in by Common Council.

#### To the Select and Common Councils.

The special committee on City Observatory and public Clocks, request leave to submit their third report:

By a resolution of the Common Council the committee is required to inquire and report upon the cost of an Observatory, and also the right of the City to occupy any of the public squares for this purpose.

In respect to the cost your committee are of opinion that it would vary from 2 to \$3000, much depending upon the disposition of the committee, as to making it an ornament to the square; but utility and beauty could both be combined for \$3000. The principle expense will be, the clock, transit and other instruments, the cost of which will vary from 3 to \$7000, the largest sum to render them very complete. The whole object may be accomplished for \$5000 and the extreme cost cannot exceed \$10,000, so that with the Philosophical Society paying one half, this highly important and useful object can be obtained for from \$2500 to 5000 expenditure from the city Treasury. For the economical and useful expenditure of the money, the corporation has a certain guarantee in its being done under the direction of the large committee on public squares; and in the proportion to be paid by the Philosophical Society, being the voluntary donations of its members.

Your committee had supposed that even a doubt could not have arisen as to the right of the City to occupy one of its public squares, with so valuable an object. As well might a question arise as to its right to plant trees and put boxes around them, or to place fire plugs within the limits. The city having an undoubted right to the land, both by title and possession; whatever is placed thereon as a permanent building becomes its property, and could only be removed as a public nuisance, which is the direct opposite of an Astronomical Observatory, it being a public benefit. A quibble may be raised on any title, as to the rights and powers of the corporation, which may be brought to bear in order to defeat the most desirable and important object; but your committee would suppose, that after granting the right to erect a monument in Washington square and the laying of the corner stone thereof, the question would not now be started as to the right of erecting an Observatory, built probably of the same material as the monument will be, of equal foundations and not of as large dimensions.

Your committee have also had referred to them, a revocation from four watch makers, of their former document in relation to the Observatory, and cannot but regret that after having had this subject under their care, by ordinance since 1833, without accomplishing any beneficial advantage to the City time; that such a mode should have been adopted to defeat an object which must furnish special advantage to their mechanical business. In justice to your committee it is right to say, that in the progress of this matter, a particular regard has been had to the convenience and accommodation of the watch-makers, as is shown by the second section of the ordinance reported. However, your committee understand that the main objection to the Rittenhouse square, arises from an apprehension that time could not be transferred with sufficient accuracy from that location to their stores. It has always been contemplated that the person having charge of the public clocks, or the city Astronomer should obtain the time by one or both of two methods, which we do not

hesitate to aver would insure the requisite accuracy.—By signal from the Observatory to be made at a stated time after meridian, and which might be observed with a common telescope by any watch-maker who choose to look for it, but which it would be the duty of the individuals before named to observe, in order to rate an astronomical clock conveniently situated for access by the watch makers; not by a common watch or ordinary chronometer, such as an individual might find himself obliged to use to get the time from any part of the city to his shop; but by a chronometer such as has been made over and over again, and which it would be in the power of the committee to procure with the requisite funds.

Your committee would further observe, that it was the decided opinion of one of our scientific fellow citizens that the Observatory should be several miles from the city; and further, that the London time is obtained from the Royal Observatory located at Greenwich, five miles below London bridge, and from whence the English and American mariners reckon their longitude.—Your committee think, that the objections of the watch-makers to a location in Rittenhouse square falls to the ground, and therefore offer the following resolution.

That the committee be discharged from the further consideration of the subjects last referred to them.

RICHARD PRICE, *Chairman*.  
ISAAC ROACH,  
PETER WRIGHT,  
HENRY S. WILLIAMS,  
JOHN RODMAN PAUL,  
DENNIS M'CREEDEY.

Philad. 4th mo. 30, 1835.

#### SAVING FUND SOCIETY.

*Report of the Northern Liberties, Kensington and Spring Garden Saving Fund Society.*

Read, January 5, 1835.

To JAMES THOMPSON, Esq.

*Speaker of the House of Representatives of the Commonwealth of Pennsylvania.*

Sir:—In conformity to an act of the General Assembly passed the eighth day of April, 1833, incorporating the Northern Liberties, Kensington and Spring Garden Saving Fund society, and for other purposes, I herewith transmit a statement of the number of depositors from the books of the said society, from the 20th day of May, 1833, to the first Monday of November, 1834, to wit:

Whole number of depositors, four hundred and eleven, of whom there are—

Nineteen not exceeding ten dollars.

Thirty-nine from ten to twenty dollars.

Sixty-three from twenty to fifty dollars.

Seventy-seven from fifty to one hundred dollars.

Eighty-two from one hundred to two hundred dollars.

Fifty-five from two hundred to three hundred dollars.

Seventy-six from three hundred to five hundred dollars.

WM. WAGNER, President.

JONA. TOWNSEND, Treasurer.

Philad. Dec. 17th, 1834.

*Statement of the Northern Liberties, Kensington and Spring Garden Saving Fund Society, to the 1st of November, 1834.*

DR.

To amount received from depositors,	\$124,636 80
Amount of interest allowed depositors,	892 12
	<hr/> 125,528 92

Deduct amount of deposits returned and interest paid depositors,

53,067 43

Balance of profit and loss,

\$72,461 47  
1,066 29

---

\$73,527 67

CR.

By the following investments, to wit:

In bonds and mortgages,	\$48,850 00
Loans on public securities,	16,877 13
Real Estate,	5,612 53
Cash in bank,	2,187 97

---

\$73,527 67

We the subscribers, auditors, appointed by the commissioners of the incorporated districts of the Northern Liberties, Kensington and Spring Garden, pursuant to an act of the General Assembly of the Commonwealth of Pennsylvania, passed the eighth day of April, 1833, entitled "An act incorporating the Northern Liberties, Kensington and Spring Garden Saving Fund society, and for other purposes"—having examined the books and vouchers of the said institution, have, in conformity to the said act, prepared the foregoing statement or report of the receipts and expenditures of the said society.

(Signed)

I. W. NORRIS,  
CHAS. KEEN,  
JOHN H. FRICKE,

December 17th, 1834.

Report of the prothonotary of the District Court of the city and county of Philadelphia, relative to the number of cases referred in that court since 30th March, 1832, under the act of 20th March, 1810, commonly known as the Arbitration law.

Read, January 16, 1835.

PHILAD. Jan. 17, 1835.

*To the Speaker of the House of Representatives.*

Sir:—In obedience to the following resolution of the House of Representatives, the subjoined report is respectfully submitted: "Resolved by the House of Representatives, that the Prothonotary of the District court for the city and county of Philadelphia, be instructed to report to this House, at as early a day as possible, the number of cases since 30th March, 1832, referred under the act of 20th March, 1810, commonly known as the arbitration law, distinguishing the cases in which the awards have been final, and those in which appeals have been entered, and stating the amount of costs of such references as paid on appeals."

The number of cases since 30th March, 1832, referred under act of 20th March, 1810, in said court, is	2,355
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The number of cases in which the awards have been final, is	946
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The number of cases on which appeals have been entered, is	495
	<hr/> 1,411

The amount of costs of such references as paid on appeals, is	\$13,581 63
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I remain with sentiments of great respect,

Your obedient servant,

JOHN LISLE,  
Prothonotary District court city and county of Philadelphia.

*Report of the Philadelphia Saving Fund Society, 1st January, 1835.*

Read, February 16, 1835.

To the Speaker of the House of Representatives, of the Commonwealth of Pennsylvania.

The subscribers, duly appointed to audit and settle the accounts of the Philadelphia Saving Fund Society, under the provisions of the third section of the supplement to the act incorporating the said society, passed on the fifteenth day of March, one thousand eight hundred and twenty-four, having been duly sworn or affirmed according to law, respectfully Report:

That in the performance of the duties assigned to them, they have diligently and carefully examined and audited the books and accounts of the Philadelphia Saving Fund society, for the year ending the thirty-first day of December, 1834; that they have examined and ascertained the amount of certificates of stock, the bonds and mortgages, and other evidences of the property and effects of the said society, and agreeably thereto have made out the subjoined statement, exhibiting the situation of the said Philadelphia Saving Fund society, on the first day January, 1835.

The auditors, in the course of the present, as well as of previous examinations made by them, again derive great satisfaction in being able to express their opinion in favor of the continued good management of the Philadelphia Saving Fund Society, and in their renewed conviction of the safety and advantages it guarantees to the industrious and frugal, however small their means may be, not only of improving their condition, but of cherishing a spirit of independence, which is the parent of many virtues.

All which is respectfully submitted.

THOS. P. ROBERTS,  
C. N. BANCKER,  
HENRY TOLAND,  
*Auditors.*

Philadelphia, 12th Feb. 1835.

*State of the Philadelphia Saving Fund Society, 1st January, 1835.*

Dr.

To amount of deposits to	
1st January, 1834,	\$4,258,068 96
Do. do. received in 1834,	457,487 78
	<hr/> 4,715,556 74
Deduct deposits returned	
to the first January,	
1834,	\$3,061,471 71
And deposits returned in	
1834,	550,870 16
	<hr/> 3,621,341 87
	<hr/> \$1,094,214 87
To balance of interest to	
the credit of depositors,	
31st December, 1834,	146,883 36
Interest passed to credit	
of depositors this day,	42,469 03
	<hr/> 189,352 39
Amount of reserved fund,	20,000 00
Balance of profit and loss,	19,613 52
	<hr/>
Dr. on the 1st of January, 1835,	\$1,323,180 78

Cr.

By the following investments, viz:

In mortgages,	\$827,134 79
Public stocks,	382,237 18

Loans on public stocks,	44,780 00
Real estate,	45,183 00
	<hr/> 1,299,334 97
Balance in bank,	23,845 81
	<hr/>
Cr. on the 1st of January, 1835.	\$1,323,180 78

Examined and audited,  
Philadelphia, 12th February, 1835,  
THOS. P. ROBERTS,  
C. N. BANCKER,  
HENRY TOLAND,  
*Auditors.*

SCUTTLEKILL NAVIGATION COMPANY.—The unusual freshet in the Schuylkill last week, considerably impeded the navigation for three days. A boat heavily laden sunk in the vicinity of Schuylkill Haven, which also temporarily preventing boats from passing. The whole line is now in excellent navigable order. During the week ending the 1st instant, the tolls received amounted to \$10,183 44. Former report \$49,643 54. Total this season \$59,826 98.

**PHILADELPHIA AND TRENTON RAIL ROAD.**

The travelling on this important work is rapidly increasing. During the week ending last Friday there were *Twenty-seven hundred and twenty-three* passengers carried upon this road. A survey of the straight turnpike between Trenton and New Brunswick has just been complete previous to the commencement of grading and laying down the rails, in order to complete the chain of communication to New York. From New Brunswick to Newark the road will be completed in all this year, and from Newark to Jersey City, it is now completed, and 2,500 passengers were carried on it last week. Within 15 months from this time, passengers will probably be conveyed by this route between Philadelphia and New York, in *four hours and a half*. A large depot 60 by 90 feet is now building by the Philadelphia and Trenton rail road Company at the corner of Front and Harrison streets, Kensington.—*Commercial Herald.*

From Miners' Journal, May 2.

**THE WEATHER.**

We have had a long series of cold wet, cloudy, damp disagreeable weather. Beyond controversy, a more unpleasant spring thus far has not occurred within memory. On Tuesday the 28th inst. a considerable quantity of snow fell, which, however, was rapidly dissolved owing to the torrents of rain which preceded and followed it. On Thursday, the sun shone out with brilliancy, and the temperature was mild and spring-like. This continued throughout the day, but yesterday morning, (Friday) a change again occurred, the weather becoming unsettled, damp and cloudy.

**THE REGISTER.**

PHILADELPHIA, MAY 9, 1835.

The Delaware and Atlantic Rail Road Company have completed a single track of Road as far as New Lisbon, a distance of 14 miles from the Delaware river. The road has lately gone into operation with flattering prospects of business. It is the intention of the Company to continue the Road to the Atlantic, terminating on the bay shore opposite Long Beach.

Printed every Saturday morning by WILLIAM F. GEDDES, No. 9 Library street.

The publication office of the Register has been removed from Franklin Place, to No. 61, in the Arcade, Western Avenue, up stairs.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.--NO. 20.

PHILADELPHIA, MAY 16, 1835.

No. 381.

## REPORT OF MAJOR BACHE.

*Rail road—Williamsport, Penn., to Elmira, N. Y.*

Letter from the Secretary of war, transmitting a copy of a report of the preliminary survey of a route for a rail road from Williamsport, Pennsylvania, to Elmira, New York.

January 28, 1834.

Referred to the Committee on roads and Canals.

WAR DEPARTMENT, Jan. 27, 1834.

Sir:—In obedience to the direction of the resolution of the House of Representatives, passed the 14th inst., I have the honor to transmit herewith a copy of Major Bache's report of the preliminary survey of the route for a rail road from Williamsport, Pennsylvania, to Elmira, New York.

Very respectfully

Your most obedient servant,

LEW. CASS.

Hon. A. STEVENSON,

Speaker of the House of Representatives.

TOPOGRAPHICAL BUREAU, Jan. 27, 1834.

Sir:—I have the honor to transmit, herewith, a copy of the report of Major Hartman Bache, topographical engineer, of the preliminary survey of the route for a rail road from Williamsport Pa., to Elmira, New York, in compliance with a resolution of the House of Representatives of the 14th instant, "that the Secretary of War be directed to communicate to this House the report of Major Bache, of the corps of topographical engineers, of his survey and estimate of the Williamsport and Elmira rail road, in the States of Pennsylvania and New York."

Copies of the drawings referred to in Major Bache's report will be transmitted to you as soon as practicable after the originals are received.

Respectfully submitted,

GEORGE D. RAMSEY,

Lt. in charge of T. B.

Hon. LEWIS CASS, Secretary of War.

*Report of Major H. Bache, Topographical Engineer, on the survey of the Williamsport and Elmira Rail Road—1833.*

Lieut. Col J. J. ABERT, Topographical Bureau:

Sir:—The following report of the preliminary survey for a rail road from Williamsport, Pennsylvania, to Elmira, in the State of New York, is submitted, in compliance with the instructions of the Bureau, under date of the 5th of August, 1832, accompanied by a general map of the country, and sheet maps, numbered from I to 7, inclusive, exhibiting the topography and profile of the route.

The proposed road contemplates a connexion between the internal improvements of the States of Pennsylvania and New York, by uniting the Pennsylvania canal, at Williamsport, with the Chemung canal, at Elmira, and seems destined to become one of the most im-

portant lines in the net of internal communication which is in progress of being spread out over the face of the country. On its completion, in connexion with the canals of the two States, new markets would be opened for the vast products of the growing population lying west, and upon the fertile shores of the great northern lakes. A choice of a market would thus be presented among the three principal Atlantic cities, yielding reciprocal advantages to the interior and seaboard. These advantages would be further extended by the execution of the contemplated rail road from New York to Lake Erie, which, taking Elmira in its route, will traverse the southern range of the counties of New York, and open a new drain for the superabundant productions of that portion of the State.

So far as the defence of the inland frontier depends upon the rapid transfer of troops from the sea board, the projected route is one of much importance. An examination of the leading features of the country will show that the first principal route, west of the Hudson, from the coast to the lakes, is by the valley of the Susquehanna; and that the movement of troops from any point south of the Delaware to that region, by striking the Erie canal at Montezuma, would very considerably reduce the distance and time required to reach the lake at Buffalo, via New York and Albany. Thus, from Philadelphia to Montezuma, the point common to both routes, by the Hudson River and the Erie canal the distance is 440 miles, whereas, by the Columbia rail road and Pennsylvania canal to Williamsport in connexion with the proposed rail road, and thence from Elmira by the canals and Seneca lake, it is but 350 miles. As regards the waters of the Chesapeake it is apparent that the comparison will prove still more favorable to the route by the Susquehanna, so soon as a means of rapid conveyance is afforded between Baltimore, or the head of tide, and Columbia—connexions already in contemplation.

These are some of the principal advantages which would be derived by the community at large by the successful prosecution of the Williamsport and Elmira rail road. There are others which are of great importance to the country in the vicinity of the work itself. The mutual exchange of the salt and plaster of New York for the iron and coal of Pennsylvania, forms of itself, no inconsiderable inducement for the proposed undertaking. It is estimated that 4,000 barrels of salt, annually find their way from Elmira, by the valley of the Lycoming, to Williamsport, under the most discouraging conditions of transportation, and which, in consequence thereof, are sold at the latter place for more than twice the cost at Elmira. Two thousand tons of bar and pig iron are returned by the same channel, at the cost of \$18 the ton; making the enormous sum of \$36,000 paid annually for the transportation of this single article between the two places, and which would be conveyed upon a rail road for about a twelfth of that amount. It may, also, be fairly anticipated that lime would, likewise, become a fruitful source of revenue, for the supply of the wide belt of country south of the productive quarries of the State of New York, and including the head branches of the Susquehanna, in which no limestone of good quality has yet been discovered.

No estimate sufficiently accurate, can be made of the quantity of plaster which is now conveyed by the present road from Elmira to Williamsport, nor do the means exist of ascertaining the quantity required by the country, which would then be open to supply from the plaster beds in New York. But to judge of the probable demand by the price now paid upon the west branch of the Susquehanna, (\$14 per ton) compared with the cost at Elmira, (\$5 50 per ton,) a large consumption may reasonably be anticipated. At present most of the supply is received from Owego, New York, by the descending navigation of the north branch to Northumberland, and thence is boated to the various points of demand. The full operation of the Pennsylvania canal, by affording a cheap and certain ascending navigation, for the introduction of this plaster, as well as that from abroad, will have the effect to reduce the present high price upon the west branch, but no further reductions can be looked forward to, until the proposed road, or equal facilities for transportation, shall be opened between that district of country and the New York beds, when this mineral, so important in agriculture, may be delivered at Williamsport for little more than half the sum now paid for it at that place.

But the strongest argument in favor of the proposed undertaking, and which of itself would seem sufficient for its early accomplishment, is, that it would make available the inexhaustible beds of iron and bituminous coal, which, besides being found at intermediate points of the route, lie stretching for miles along the valley of the Lycoming and its tributaries. These coal beds form a part of a region of considerable extent, which, including the district of country watered by the Tioga, Towanda, and the Loyalsack, with the above named stream, constitute it is supposed, the limit of bituminous coal in Pennsylvania, to the north and east. The varieties are said to be adapted to the various purposes of manufactures, steam engines, coking, iron smelting, and domestic use. In addition to the demand of the seaboard, it would find a ready market by the projected road, through channels already opened, in the interior, where the diminution of wood as a fuel is already sensibly felt. The salt works alone of that state would require a large quantity in the process of manufacture. — And, should the experiments now making in the immediate vicinity of the Lycoming mines, for the production of coke, be successful, another source of profit would accrue to a line of easy communication passing through this valley, by the supply of distant demands for this desirable fuel, and in a greater production of iron from the ore, which is said to abound in the hills.

The formation of branch rail roads, authorised by the charter, by penetrating the iron and coal region at various points, would swell considerably the amount of these products, and give additional importance to the main line. Among the valleys affording facilities for such undertakings are those of Trout river, Red run, Roaring branch, Sugar-work run, and others, tributaries of Lycoming, and of the Middle fork, and lesser branches of the Sugar creek.

In enumerating the advantages which would be likely to follow the execution of the Williamsport and Elmira rail road, the furnishing a market for the surplus wheat, flour, pork, butter, whiskey, lumber, and other products of the country, must not be overlooked. — These, with the tolls upon merchandise going inland, and the fare of passengers, would furnish constant and abundant sources of revenue.

The act of incorporation from the State of Pennsylvania defines the route as "beginning at Williamsport, in the county of Lycoming; thence, by the way of Lycoming creek, to the northern line of Pennsylvania, in the direction of Elmira, in the State of New York." — The route thus vaguely indicated was followed by pursuing the valley of the Lycoming to its head; thence, across the country, to a depression formed by the north

branch of Towanda and south fork of Sugar creek; thence, by the valley of the south fork of Sugar creek, crossing the main stream just below Troy; thence by that of the north fork of the same creek, to the source of the south branch of Secley's creek, generally called South creek; and lastly, by the valley of this stream, upon which the State line was crossed, to the Chemung, at Elmira.

By reference to the general topography of the country, it will appear that the route has in view to connect the west and north branches (Chemung river) of the Susquehanna, by a line somewhat, in relation to those streams, as the chord of a circle is to the arc, and that their tributaries, running in the direction of radii, furnish the means for the accomplishment of that object.

In the route there are three summits to be overcome, namely, that of the Lycoming and Towanda, of the north branch of the Towanda, and south fork of Sugar creek, (the summit level,) and of the north fork of Sugar creek and South creek. These, forming the natural divisions of the route, will, for convenience of description, be adopted in the report; the first and third being further subdivided for the better attainment of that object. The following statement will show the distance and elevation of these summits, relatively to each other and Williamsport; from which it appears that, but for the necessity of conforming to the lesser accidents of the ground, these elevations could be overcome at moderate grades of inclination. These characteristics will be noted as they occur, in the order in which the different divisions are taken up.

*Statement of the distance and elevation of the summits of the Williamsport and Elmira rail road route, relatively to each other and Williamsport.*

LOCATIONS.	Williamsport to the Lycoming summit.		Lycoming summit to the summit level.		Summit level to the south creek summit.		South creek summit to Elmira.	
	mi's.	feet.	mi's.	feet.	mi's.	feet.	mi's.	feet.
Length.	33½	403	33½	403	1½	222	351	428
Distance from Williamsport.								
Ascent.								
Descent.								
Height above Williamsport.								

NOTE.—"Previous surveys give the height of the Susquehanna, at Williamsport, above the tide, at 458.640 feet. The rise thence to the Chemung, at Elmira, is 347.085 feet, (the plane of Williamsport to that point 315.165 feet—31.290 feet, the elevation of said plane above the river,) making a total of 825.725, feet as the fall of the Susquehanna from Elmira to the tide."

## FIRST DIVISION.

*From Williamsport, by the Lycoming Valley, to the Lycoming Summits. (Lycoming and Towanda Creeks.)*

Subdivision 1st. From Williamsport to the point near the site of an old bridge across the Lycoming, just below Robbins's, 26  $\frac{3}{4}$  miles and 170 feet—ascend 374.793 feet.

The valley of the Lycoming, for the distance included in this subdivision, is from one-eighth to three-fourths of a mile wide. Its general direction for the first three miles is about N. 20° W., when it assumes a course of N. 40° E., and, although circuitous, is not serpentine. The stream, like most others of mountain regions, altering from side to side, skirts the bases of the hills and mountains which bound the valley. These elevated grounds, presenting various aspects, from gradual and cultivated slopes to rocky and precipitous faces, are, at the mouth of the Lycoming, barely one or two hundred feet above the valley; but, upon approaching the sources of the stream, they attain a height of upwards of a thousand feet. The bottoms are generally high, and for the most part cultivated. There are portions, however, which bear the marks of freshets, which, once or twice a year, overflow the banks of the stream, forming new and temporary channels in discharging the surplus waters. The bottoms, as the country becomes more thickly settled, will, every successive season, be less subject to these inundations by the clearing of the timber from the immediate banks of the stream, and the removal of the large quantity of drift wood, now the main impediment to a free discharge of the floods. To provide, however, against accidents from freshets, it would be proper in every instance, to place the road bed entirely above their reach.

The nature of the ground renders it impracticable to follow either side of the stream throughout for the trace of a road, without encountering the expensive and difficult plan of forming its bed upon the face of the hills, which, at intervals, approach the stream.—Hence, it is frequently to be determined whether it is better to meet and overcome these difficulties, or to incur the expense of crossing the stream. In one case, the cost of construction would be greatly augmented by the increased distance and frequent recurrence of high and rocky hills, rising at various angles up to 45°, to conform to which, the trace would be necessarily indirect and circuitous; whereas, by crossing from bank to bank, the trace is not only more direct, having fewer curves, and those of greater radii, but is drawn upon ground more favorable in profile and for construction. To these advantages are opposed the necessity of twice crossing a stream of small capacity. As the Lycoming, however, is very variable in size, the proper points for these crossings must be determined by the width, in connection with the character of the banks and course, with reference to the trace of the road.

Adopting the latter alternative, the survey was conducted upon either side of the stream, as the ground appeared more favorable. It is not pretended, nor could it be expected from the nature of the operations, that the selections made in every instance were always the best. These points must be decided by future surveys. In the subdivision, however, under consideration, the alternative, with the exception of the 4th and 5th crossings from Williamsport, was in such strong contrast, that the selections will probably be confined. The excepted one may, upon further investigation be avoided.

Having given the main features of a portion of the route comprised in any of the principal divisions, and the reasons generally which governed the course, of the experimental line, it becomes necessary to describe more minutely the characteristics of the ground which

will affect the formation of the road. In doing this, portions of the survey will be taken most convenient for a proper illustration of the subject, without reference to distance. The grades are assumed to the same end; as a final location, by adapting the road to the minute details of the ground, will not only increase the number, but materially change them.

I. Williamsport, Pa.  $2\frac{3}{4}$  miles and 251 feet—ascend 2.010 feet, or 0.925 feet per mile.—Commencing at Williamsport, the route pursues nearly a west course, over high and cultivated bottoms, to the Lycoming, which it crosses just below the bridge, to avoid the steep and rocky hills which, for a mile and a half, impinge upon the stream. The profile upon the ground upon the line run, exhibits a cut at an average depth of 9.5 feet for three-fourths of a mile, which may be lessened by inclining the trace more to the south, to avoid the last swells of the high grounds just referred to.

II.  $1\frac{1}{2}$  miles and 412 feet—ascend 17.350 feet, or 11.941 feet per mile.—The line now takes up, by a curve of large radius, a direction a little east of north, and, having passed round the base of subsiding slopes of the hills, which bound the valley upon that side, inclines again to the west, and, near J. Bennet's, a second time passes the creek. The ground is high and cultivated, and of the most favorable character for the formation of the road-bed. The inducements for crossing the stream below are equally strong in the present instance, on account of the high and rocky margin of the creek for nearly a mile and a half upon the west side.

III.  $1\frac{1}{2}$  miles and 168 feet—ascend 14.365 feet, or 11.207 feet per mile.—This distance, traced upon equally favorable ground with the last, has a direction west of north, when the Lycoming is crossed again, to avoid the many rocky and precipitous hills which, for five-eighths of a mile, make down close to the water above McKinney's forge.

IV.  $1\frac{1}{2}$  miles and 637 feet—ascend 14.05 feet, or 10.801 feet per mile.—Resuming the same general direction, after passing the stream for about half this distance, the line is then directed upon a north course, at the close of which, by the selection of the east side, for the reasons governing in the former cases, the creek is again crossed at Thompson's ford. This is one of the instances where a final location, by combining the two last sections in one straight line, may remove the trace to ground of more favorable profile, and shorten the distance.

V.  $2\frac{3}{4}$  miles and 296 feet—ascend 31.424 feet, or 11.721 feet per mile.—It is a question for future decision, whether, from the close of the last section, the line should continue upon the west, or return to the east side. In one case, the road would of necessity be carried along the face of two very steep hills for 3,500 feet or at an equal expense be carried across to the low islands (Hay's) which lie at the base. In the other, it would have to cross at the east side, with the prospect of returning to the west at the close of the section, and traverse the bottoms, which with the exception of a hill of moderate slope for half a mile, are there found throughout.

The cursory surveys made at the time, led to the adoption of the latter alternative; the line of levels being carried on the east side of the stream, passing through the grounds of the widow Thompson, S. Thompson, and T. Hayes. The general direction of this portion of the route is N. 30° W.; the bottoms high and cultivated.

VI.  $\frac{1}{2}$  mile and 516 feet—ascend 9.936 feet, or 11.721 feet per mile.—The question here recurs as to the selection between the banks of the stream. To avoid a very steep and rocky hill, which bounds the east margin of the creek for half a mile, it was decided to carry the line upon the bottoms opposite, although the indications of the character of the ground, a short distance above, seemed to offer equally strong reasons

for soon returning to it. The banks at the crossings, at the extremities of this distance, are very favorable, and, although made obliquely to the direction of the stream, only 140 and 120 feet respectively. The general direction of this section is about north. The grade assumed the natural inclination of the ground, which is of the most favorable character.

VII.  $\frac{3}{4}$  miles and 412 feet—ascend 9,690 feet, or 21,389 feet per mile.—Direction N. 30° W. round to N. 58° E. Upon regaining the east bank, the trace of the survey is through a bottom, somewhat cut up by freshets for 1,600 feet, and then for 625 feet upon the face of the hill, which extends to the stream, near the second bridge, and presents along its margin, for nearly one and a quarter miles, a steep and rocky face. The course of the valley, which heretofore, had been some 15° or 20° west of north, here turns suddenly to the right, and assumes a direction about N. E. To increase the radius of the curve over the trace described by the survey, it will be necessary to cross the stream lower down, where it forms two channels by the interposition of Reid's island. By this means the route will avoid the short portion of hill side mentioned above, and the curve be increased to a radius of about 800 feet, with which it will, even then, be necessary to describe an arch of one-third the circumference, to enable the line to take up the new direction which the valley here assumes.

The difficulties of the ground upon the margin of the stream, the character of the stream itself, and the necessity of carrying the trace upon an admissible curve, to conform to the new direction of the valley, tend to make this section of the route the most expensive of any equal distance yet described.

Thus far, in a distance of little more than 10 $\frac{1}{2}$  miles, the route crosses the Lycoming seven times; the 4th and 5th (from Williamsport) being those only, the propriety of which may not be sustained by further surveys.

VIII.  $\frac{4}{5}$  miles and 538 feet—ascend 56,520 feet, or 12,779 feet per mile for 2 $\frac{3}{5}$  miles and 636 feet, and 10,818 feet per mile for 1 $\frac{2}{5}$  miles and 562 feet.—The trace of the line is now found on the west side, having a general direction of N. 40° E. passing Hepburn's forge, Glendennin's, and Allen's. It pursues a very direct course over elevated and cultivated bottoms, with a single exception of a side slope of 400 feet, of moderate inclination, and constitutes, probably, the greatest extent of consecutive favorable ground throughout the whole route. Wolf and Trout runs are crossed in this section; the latter, in consequence of having the same general direction as the survey, four times in five-eighths of a mile, but which, if not avoided in the final location, is considered, from the size of the stream, of little importance.

To show how strongly contrasted is the character of the ground upon the opposite side of the stream, and the propriety of the selection in the present action, the following description is given: one mile and 1,020 feet, very steep and rocky hills to the water's edge, which, after an interval of narrow bottom for 4,300 feet, are again found for 1,500 feet. Bottoms then skirt the stream for 3,800 feet, followed by 3,600 feet of hills, close to the water. The remaining distance, with the exception of a single spur of 1,000 feet, is bottom.—Thus the line, if continued on the east side, would, besides involving a curvature of small radius, encounter steep and rocky hills for two miles and 1,840 feet, and increase the distance almost 1,000 feet. Whereas the west side presents throughout, saving the two crossings, no obstacle to a cheap and direct location.

IX. 1 $\frac{1}{2}$  miles and 302 feet—ascend 21 feet, or 17,764 feet per mile.—Crossing the stream near R. Glendennin's, at the close of the last section, to avoid the hills, which, for a mile and a quarter, rise from the Lycoming, at various angles up to 50°, the line runs upon

highly favorable ground, in the direction of about N. 20° E.

X. 1 $\frac{1}{2}$  miles and 228 feet—ascend 17,865 feet, or 13,810 feet per mile.—The favorable ground is then again sought upon the west margin of the stream, by crossing near the ford above J. Apkin's; the east presenting hill sides, with a short intermission for about a mile. The route, which, in this section, is in a direction of N. 70° E. crosses Trout spring run, a stream of small capacity, and, for a distance of 5 or 600 feet, occupies a narrow strip of bottom, barely sufficient for the purposes of a road.

XI. 1 $\frac{1}{2}$  miles and 239 feet—ascend 20,505 feet, or 15,831 feet per mile.—The west side is now abandoned about one-fourth of a mile above S. Reed's, in consequence of two rocky and precipitous hills, whose united lengths upon the stream are about three-fourths of a mile, and the line carried over to the opposite shore, where, with a direction N. about 50° E., it traverses ground, which, with the exception of 800 feet of hill side, where the angles of inclination are from 15° to 30°, is of tolerably favorable character, consisting of bottoms of different elevations, the latter portions showing evidences of the effects of freshets.—These, which, for the part of the valley of the Lycoming already passed over, have been unfrequent, and for the most part confined to the margin of the stream, because, in the ascent, from the commencement of this section, not only more frequent, but extending to every part of the bottoms. The necessity, therefore, for a proper elevation of the road, above the reach of the highest freshets, becomes a subject of more anxious solicitude.

XII.  $\frac{3}{4}$  mile and 94 feet—ascend 15,305 feet, or 17,143 feet per mile.—To avoid the bad hill sides, which, for a half a mile, approach quite to the creek upon the east side, the survey now passes the stream below M. Riley's, and, upon the same general direction as the last section, traverses a high and cultivated bottom of the most favorable description throughout.

XIII. 2 $\frac{3}{5}$  miles and 242 feet—ascend 45,590 feet, or 17,670 feet per mile.—By reason of the frequent recurrence, in the next two or three miles, of abrupt and rocky hills, which press upon the west margin of the stream, the route now crosses at Luck's, and pursues the east side in a tolerably direct course of N. 10° E. upon ground of the following description; 4,651 feet bottoms, somewhat cut up by freshets of the main stream and Slack's run; 1,110 feet hill side, at an average angle of 25 deg.; one mile and 820 feet, generally favorable and cultivated bottoms; the remaining distance to the stream, of 2,150 feet, traversing a beach and a slightly elevated piece of ground. It is probable a final location will avoid these elevations, not so much, however, on account of the features of the ground as the winding course of the route, by striking the west side below the island, near the confluence of Frozen Branch with the Lycoming. Pleasant stream, which runs dry during the summer months, is crossed in this section.

XIV. 2 $\frac{1}{2}$  miles and 125 feet—ascend 43,215 feet, or 19,051 feet per mile.—The trace of the survey is again on the west side of the Lycoming, and, passing near Eben Smith's and Hall's, has a direction N. about 35° E. to the junction of Red run with the main stream, both of which it is proposed to cross with a single viaduct. The characteristics of the ground in this section may be thus described: one mile and 3,061 feet bottoms, showing in places the effects of freshets; 1,077 feet hill side of 35 degrees, and 2,527 feet of very favorable, and, for the most part, cultivated bottoms. The opposite side of the stream is in strong contrast with this, being very rocky, and very precipitous hill sides, with an exception of about 3,000 feet, to its very margin.

XV. 2 $\frac{1}{2}$  miles and 300 feet—ascend 55,155 feet, or 25,195 feet per mile.—This section, which closes the



first subdivision, passes through Newell's and Abbott's bottoms, and has, on rather a circuitous course, a general direction of N. 10° W. The ground, which may be considered favorable upon the whole, is of the following description: one mile and 70 feet for the most part cultivated bottoms, with indications of the effect of freshets; 1,200 feet irregular and rocky; 2,650 feet high and cultivated bottoms; and 2,300 feet cultivated bottoms, cut up in places by freshets.

*Subdivision 2d.* From a point near the site of an old bridge across the Lycoming, just below Robbin's, to the Lycoming summit, (Lycoming and Towanda creeks,) 7 miles and 233 feet—*ascent* 335,130 feet.

The inclination of the Lycoming valley becomes more abrupt upon approaching its head waters. To what extent this is the case, may be gathered from the two subdivisions comprising the valley, in which, although the rise in each approaches equally, the lengths are to each other as four to one. Up to this point the grades adopted were, for the most part, nearly coincident with the natural surface of the ground. This is no longer practicable, having a view to locomotive power, in consequence of the irregular steps in the remaining ascent. Thus to the head of the valley, the ground rises as follows:

1 mile and 280 feet, at the rate of 23,222 feet pr mile.

1	160	"	50,150
2	580	"	37,579
3	80	"	53,889
4	33	"	2,213
5	80	"	52,949
6	100	"	317,548
7	300	"	123,510
8	14	600	34,155

It is necessary, therefore, in contemplation of such an application, to disperse the whole rise throughout the entire length of the subdivision. To do this, the bottoms must be abandoned for the hills which bound the valley. Independently of the consideration of grades, it is no longer advisable, from the new character they now take, to continue the bottoms, which, narrowing in the ascent, are evidently occupied at times in their whole width, by the stream. In these remarks may be seen the reasons for adopting the limits given to each of the subdivisions: 1st. The occupation of the bottoms so long as they proved favorable to location; and 2d, the propriety of leaving them at a point from which the Lycoming summit could be overcome by the application of locomotive power. It will have been remarked that the survey did not always pursue a trace in accordance with these views, but, merely experimental, occupied, at all times, the lowest points of the valley, noting the character of the ground in all cases, upon either hand.

The general direction of the valley for the first two miles of this subdivision is about N. 15° E., and thence to the Lycoming summit, N. 65° E. The stream, unimportant in size, even in the first few miles, dwindles to a mere thread, and during the low stages of the waters, disappears entirely in places by subterranean channels. The width of the bottoms varies a mile, the valley is confined to a narrow rocky gorge. The face of the hills which bound the valley are thickly studded with loose rock, in some places in large masses. Fixed rock is also abundantly found, and at a few points, in high and precipitous faces.

The stream, from nearly the commencement of this subdivision, tends very much to the eastward, being turned off from its wonted course by a spur of the Allegheny. It presents its western, or now, more properly, northern margin along the mountains' base, from which it receives the greatest number and largest of

the tributaries. Hence, the final location will probably occupy the slopes of the opposite hills, as exhibiting fewer impediments. It happens, fortunately, that the angles of inclination of the hills upon the east side are less than those upon the west, and upon either hand invariably less abrupt as the proposed plane is removed from the bed of the valley; a great advantage whenever it becomes necessary, from the excess of this inclination, to place the base of the road upon the bottoms.

1.  $1\frac{1}{2}$  miles and 420 feet—*ascent* 43,740 feet, or 36,312 feet per mile.—Having crossed the Lycoming, at the close of the last subdivision, at an elevation of 10.5 feet, the line should pursue a course along the base of the hills, to some favorable point for crossing the bottoms to the east side, upon which, for the reasons already given, it is probable the trace will be continued to the head of the sudden pitch in the valley above. The deviation here contemplated, from the line actually surveyed, is induced by the facility afforded in obtaining materials for the formation of the road-bed.

The trace, in reaching the east side, may cross the main stream and Roaring branch by a single structure; but, in this case, the road must be cut for about an eighth of a mile entirely into the face of the mountain, as the near approach of the stream precludes the formation of the road bed in any other way. It was to avoid this alternative, extending to the entire section, that the west side was selected in the first instance.—The general course of this section is nearly north.

II.  $4\frac{1}{2}$  miles and 393 feet—*ascent* 228,330 feet, or 52,800 feet per mile.—This section has a direction of about N. 60° E. and extends along the eastern face of the valley to the head of the narrow ravine above, excessive inclination being overcome by the grade here assumed, and which, from the very uniform character of the ground, being seldom intersected by transverse indentations of much importance, it is believed, may be maintained throughout. A road thus located would, for three quarters of a mile and 360 feet, be elevated about 15 feet above the bottoms;  $1\frac{1}{2}$  miles and 320 feet; 32 feet and  $1\frac{1}{2}$  miles and 113 feet, 50 feet. Thence, in the remaining distance of one fourth of a mile and 260 feet, the plane rapidly approaches the natural bed of the valley, which it intersects at the close of the section. The transverse slopes of the mountain vary between 15° and 45°, and the short distances, where rock prevails, they become even more abrupt. Rock, indeed, either fixed or loose, is very abundant throughout the whole of this section, and may be profitably used in the construction of the road-bed where the steepness of the hills renders it necessary to base it upon the bottoms.

III.  $1\frac{1}{2}$  miles and 80 feet—*ascent* 63,060 feet, or 41,620 feet per mile.—Having overcome the rapid ascent of the valley at the narrow ravines, the face of the country assumes a milder aspect. The bottoms, which had entirely disappeared, are again found from 150 to 1,200 feet in width, to the summit. The hills, too, which had previously been steep and rocky, and unfit for cultivation, now bear the evidences of having already yielded their bounties for the use of man. It would seem that a mountainous country had been left for one which might justly be described as hilly. The Allegheny, which had for some time turned the route from its true direction, by its spurs thrown out towards the east, now assumed, upon a sudden, a course nearly parallel to it, making easier the task of continuing the line to its destination.

The grade set down for this section, requires a cut of an average depth of 7.5 feet for  $1\frac{1}{2}$  miles and 60 feet, the propriety of avoiding which, by continuing the plane of section II, may be decided upon hereafter.—The course of this section is the same as the last.

## SECOND DIVISION.

From the *Lycoming summit (Lycoming and Towanda creeks) to the summit level (north branch of Towanda and south fork of Sugar creek), 11½ miles and 222 feet—ascend 230,335 feet. (Revised distance, &c. 11½ miles and 307 feet—ascend, 219,895 feet.)*

The survey has now reached the mutual source of two streams, which empty into the north and west branches of the Susquehanna. The next step was to pursue the route to the summit level, upon the south fork of Sugar creek. From the head waters of the Lycoming, a series of rough levels, to determine the height of this summit, as well as the principal intermediate points, was executed, to direct the operations in extending the experimental line. This led to the adoption of an ascending grade of 20 feet in the mile, which, being sufficient for the objects of the survey, was maintained throughout, as near as the features of the ground would admit. These have indeed the recommendation of the grades which may be adopted, with only slight variations, for the sections under this division of the route.

All intermediate descent in attaining the summit level, by reason of the elevation already to be overcome, should of course be avoided. Hence the propriety of at once rising from the valley at the common source of the Lycoming and Towanda, and not by pursuing the valley of the latter until some one of the branches leading in the proper direction should offer, to reach the desired point upon Sugar creek. The descent of the valley of the Towanda to Canton corners, a distance of about four and a half miles, is 96 feet, and thence, one and a half miles, to the entrance of the valley of Rodgers' mill creek, (the first which presents itself for that purpose,) it is increased, estimated upon the same inclination, to 128 feet; all of which fall must be re-ascended, in addition to the height of the summit level above the Lycoming, in about eight miles, or at the rate of nearly forty-five feet per mile. Besides the disadvantages of the route under such grades, it is about two miles longer than the one traced.

Heretofore the line was confined to a narrow valley by the mountains and hills by which it is bounded. It now pursues a course by the most direct route across the country to the close of the division, by the depression caused by the head branches of the tributaries of the north branch. Fortunately the country assumes a mild aspect. The Allegheny, which had thrown one of its spurs across the route near the source of the Lycoming, is here called the Armenia mountain, which forms, it is supposed, the northeastern termination of the range. It now turns off more to the north, and, running nearly parallel to the trace, limits the streams which are tributary to the north branch. The streams, to the close of the division, run across the general course of the route, but from the easy rolling character of the country, and the depression caused by the lesser branches of the Towanda, they offer no material obstacle to a very direct location and upon favourable ground.

The ground which, whenever it was necessary to leave the bottoms, had been impracticable, both from its steepness and the nature of the soil, is now, with very few exceptions, favorable, and of easy excavation. Rock is still abundant, though it does not prevail to the same extent as heretofore.

I. 3½ miles and 133 feet—ascend 63,975 feet, or 19,533 feet per mile.—This section, rising from the summit of the Lycoming, pursues a course about north, along the western face of the Towanda valley, to Spaulding's mill creek branch. The trace for the first three-quarters of a mile is found upon the bottoms, when it passes upon ground composed of knolls, benches, and moderate slopes, for the remaining distance. The average of these slopes may be set down at fifteen degrees.

With the exception of the embankments necessary to cross the valleys of Schroeder's and Spaulding's mill creek branches, the whole distance is favorable to a direct and cheap location, as the soil is free for excavation, and the ground nearly conforms, with the exceptions above, to the given grade. The passage, however, of these two valleys, would require works of no inconsiderable magnitude, should the present grade be adhered to, which is desirable, in order to reduce the greater inclination of the succeeding planes, to enable the road to surmount the rise in the gap through which Pratt's mill creek is approached. The length of the first of these embankments would be 1,460 feet, the second 1,000 feet, their average height 26 and 25 feet, and greatest inclination above the streams 57 and 62 feet, respectively.

II. 2 miles and 85 feet—ascend 58,380 feet, or 28,957 feet per mile.—Having crossed the valley of Spaulding's mill creek branch, at the close of the last section, by a grade which places the line above the irregular ground which skirts the bottoms, the survey, for about three-fourths of a mile, is continued upon a course of N. 5° E. along the face of the very smooth hills back of Spaulding's, which rise at angles of about 20 deg.—Thence, to the end of the section, the ground consists of meadows, benches of favorable elevations, and very gentle slopes; the general direction of the line having changed to about N. 50° E.

A cut of 1,000 feet, and 25 feet at the deepest point, is necessary to maintain the grade set down for this section; but the additional length exhibited by the profile, as also the greater part of the embankment across the meadows, may be avoided in the final location. The road is forty feet above Pratt's mill creek, which may readily be crossed, even at that elevation, by a bridge of less than one hundred feet.

III. 2½ miles and 325 feet—ascend 65,170 feet, or 23,179 feet per mile.—This section, which extends to the crest of a gap, caused by the approach of two small branches tributary to Rodgers' mill branch, leaves Canton corners on the right, and has a general direction, upon a line somewhat serpentine, of N. 20° E. The route, after crossing Pratt's mill creek, turns more to the north, and running nearly parallel to the road from Canton corners to Troy, is traced, for three-fourths of a mile, upon ground consisting of smooth hill sides, at angles of about 15 deg. This is succeeded by a meadow, requiring an embankment for 600 feet in length, and at the highest point, 45 feet in height. The ground for 1½ miles becomes then very favorable; cultivated flats and easy slopes, extending to a depression for 600 feet, at Rockwell's branch of Rodgers' mill creek, which will require an embankment 20 feet in height. The gap already referred to is now fairly entered, and along its western face, upon slopes of 20 degrees, the line is carried, uninterrupted by a single indentation of ravine of any size, to the commencement of a cut of nearly 1,000 feet in length, by which it is proposed to reduce its height 12 feet. The line crosses the main road in this section, near Pratt's.

IV. 3½ miles and 424 feet—ascend 32,270 feet, or 8,791 feet per mile.—This completes the second division. To account for the discrepancy which appears in the sum of the distances of the sections comprising it, compared with that already given, it is proper to state that it is caused by the removal, for reasons which will appear hereafter, of the summit level to an extent equal to that difference.

From the close of the last section, the trace is upon the face of hills, rising at angles of 20 degrees, whose uniformity is uninterrupted, except by two narrow ravines, to a depression formed by another branch of Rodgers' mill creek, where the main road crosses it, near Stephen Shute's. A cut, 10 feet at the greatest depth, and 1,000 feet long, is here necessary to satisfy the conditions required at the head of the section. In the following distance of rather more than half a mile, the

ground is not so favorable, as it lays at angles of 28 degrees, and is intersected by three considerable ravines, which cut it up into knolls. The valley of the principal branch of Rodger's mill creek, moreover, must be crossed by an embankment of 175 feet, at an elevation of 42 feet. The line having intersected the main road at one of these depressions near Reuben Taber's, traverses very favorable ground, both as regards the character of the surface and the nature of the soil, for the remaining portion of the section.

### THIRD DIVISION.

*From the summit level, (north branch of Towanda and south fork of Sugar Creek,) by the valleys of the south and north forks, to the South creek summit; (north fork of Sugar creek and south creek.)*

Subdivision 1st. From the summit level (north branch of Towanda and south fork of Sugar creek) to Sugar creek at Long's mill pond,  $5\frac{1}{2}$  miles and 181 feet—descent 315. (Revised distance, &c.  $5\frac{1}{2}$  miles and 96 feet—descent 304,560 feet.)

The survey having arrived at the summit level upon one of the head branches of the south fork of Sugar creek, the next object was to carry the line to the head of the north fork of the same creek. This north fork is also the source of South creek, the valley of which leads to Elmira.

Sugar creek divides, in the vicinity of Troy, into three principal branches, called North, South, and Middle forks. The first two, pursuing nearly opposite courses, embrace within an arc of  $140^\circ$  a district of country which is throughout cut into ridges by the deep valleys of these streams and their tributaries, to their very sources. To carry the line directly across these ridges, is utterly impracticable. It remains, therefore, to make a selection between a route passing round the head of the numerous tributaries of Sugar creek, and another by the valleys of the south and north forks, upon a more easterly course, crossing the main stream below their confluence.

Upon examining the country, it was found, that although it was practicable to carry a road for the first few miles along the face of the Armenia mountain, which bounds the numerous forks and branches of Sugar creek, yet it was soon perceived, as the line would have to conform to this range, that the distance would be greatly increased, particularly as it would be necessary to retrace the line upon nearly a parallel course, to enter the valley of that branch of the north fork which has its source with South creek.

Upon the other hand, by the selection of the eastern route, although more direct and more favorable as far as the lesser accidents of the ground and the nature of the soil are concerned, it would be necessary to descend the valley of the south fork by a very rapid grade, at the expense of a tolerable deep cut at the summit, and a high embankment, in order to cross the main stream at an admissible elevation, the surface of which is 420 feet below the summit level. The equated distance would, likewise, be increased proportionally to the amount which such a trace would carry the road below the South creek summit, beyond a line of the same length, drawn to that point by descending grades solely.

Notwithstanding these objections, the eastern route was preferred to the western, as opposing fewer obstacles, so far as a comparison could be made on the examination had of the latter route. Before a final decision, however, a thorough examination should be made of the country to the westward, to test the capabilities of a route in that direction.

As a base to govern the operations in the third division, a set of preliminary levels was made to determine the relative heights of the principal points down the south fork to the main stream, and thence to the head of South creek. These gave the following results, corrected by the subsequent survey. The fall from the

summit level to the South creek summit, 198,715 feet, and to the surface of Sugar creek, below the junction of the various forks, 420,630 feet, nearly one-half of which, 265,840 feet, occurs in rather less than the first half a mile. It was also ascertained that Sugar creek might be crossed, in the vicinity of Long's mill pond, at an elevation of at least 100 feet, still leaving 520 feet fall from the summit level to that point, in a distance estimated at about five and a half miles.

This fall might be made by a series of inclined planes and the application of stationary engines near the head of the south fork; but anxious to continue the route applicable to locomotive power, it was determined to fall 30 feet in the first instance, by a cut at the summit level, and thence, upon an assumed grade of 1 in 100, strike the point of crossing at Sugar creek. This was accomplished under singularly fortunate conditions of the ground, as will be seen by the details of the sections; in which will also be explained the proportions for the reduction of the cut just mentioned.

This subdivision has a general course about N.  $30^\circ$  E. It occupies the eastern face of the valley of the south fork of Sugar creek, which, from its great regularity, being uninterrupted throughout by a single indentation of consequence, is broadly contrasted with the side opposite, which is divided into high and narrow ridges, by a quick succession of branches, towards the west. It offers, indeed, with but one important exception, no obstacle to a very direct and cheap location; and so uniform is the ground on this side of the stream, that upon one portion of it of about two and three-fourth miles, a location, although removed some one or two hundred feet above the bottoms, would deviate but slightly from a straight line.

The trace for about one-third of the length of this subdivision is upon cultivated ground, the remainder being in woods. The soil although rock, loose and fixed, is sufficiently abundant for all the common purposes of construction, offers little or no obstruction in the excavations and embankments necessary in the road bed formation.

1  $2\frac{1}{2}$  miles and 420 feet—descent 116,400 feet, or 52,800 feet per mile.—As it is highly desirable to reduce the amount of descent to the crossing at Sugar creek, a cut was determined upon by continuing upward through a point in the valley of the south fork, 30 feet below the summit level, the plane of the above grade, and by which the summit level of the route would be thrown upon the Towanda side, and the length of this subdivision increased, as shown by the revised distance already given. A cut so designed would have a length of 1,956 feet, and an average depth of 12 feet; its greatest depth being 22 feet. Thence, from this cut, the line pursues, upon about equal distances and easy curves, the courses of N.  $35^\circ$  E., E. and N.  $00^\circ$  E., upon ground that is equally divided between level spaces and slopes averaging  $12^\circ$ .

In consequence of a depression in the ridge near the close of this section, caused by the approach of Mud creek, (a branch which Sugar creek receives a few miles below Troy,) and the south fork, it will be necessary, in maintaining the desired grade, to embank for a distance of 3,450 feet, to a height at the lowest point of the ridge, of 44 feet, or upon an average height of 20 feet.

2.  $3\frac{1}{2}$  miles and 336 feet—descent 118,160 feet, or 52,800 feet per mile.—For the first  $2\frac{1}{2}$  miles, the route is N.  $50^\circ$  W. when, by a curve of 1,500 feet radius, it takes a course of N.  $65^\circ$  E. The ground traversed is throughout a very uniform ridge, having an average transverse slope of  $10^\circ$ , and uninterrupted except by three narrow and unimportant ravines. As the line approaches Sugar creek, it again turns more to the north, upon a curve whose radius is about 1,000 feet, in order to reach the most favorable point for crossing the stream. This is effected where Sugar creek changes its course suddenly from N.  $40^\circ$  W. to S.  $60^\circ$  W., and at a height

of 105.630 feet above its surface, by a bridge of only 168 feet—connecting embankments upon either hand, whose united lengths are but 480 feet, showing, conclusively, the favorable formation of the ground at the point selected, for maintaining the elevation of the road; an object of vital importance, so far as the application of locomotive power is concerned, when the grade already assumed is considered. The length of the bridge is estimated by assuming  $60^\circ$  for the slopes of the abutments, from a water line of 83 feet, that slope being the natural inclination of the rocky precipice which forms the bank, for a height of 70 feet on the south side.

The elevation of a road across Sugar creek might, without much additional expense, certainly not in proportion to the advantage gained, be increased so as to reduce the inclination of this section something below 50 feet in the mile; at the same time that it would, in a corresponding degree, diminish the elevation to be overcome in reaching South creek, below the summit of which, it will have been perceived, the grades from the summit level have already depressed the line.

Stone of good quality, near at hand, is abundant, and well suited to the purposes of the sub-structure of any work designed to cross the stream.

*Subdivision 2d.—From Sugar creek, at Long's mill pond, to the South creek summit (north fork of Sugar creek,)  $3\frac{1}{2}$  miles and 77 feet— ascent 116.285 feet.*

It will have been perceived that, in order to cross Sugar creek at an admissible elevation, the grades from the summit level carried the line below the head of South creek, by the quantity given above. The object of the present subdivision is, by regaining an equal elevation, to reach the summit of that stream. In the survey, this was done by carrying the line upon a uniform grade along the hills on the east side of the valley of the north fork, the general direction of which is  $N. 10^\circ W.$  The features of the ground, however, in the progress of the survey, soon showed that a route so designed would, from the number of high embankments required to cross the valleys of the small streams tributary to the north fork, be very expensive. It was, therefore, been deemed proper to suggest, upon the present knowledge of the ground, the grades given to the sections forming this subdivision; the survey being sufficiently full for the purposes of description under the change.

The soil in this subdivision, though stony, may be considered, on the whole, favorable for grading. Rock seldom appears. About one-half the distance is cultivated.

I.  $1\frac{1}{2}$  miles and 554 feet, level.—The course of this section is  $N. 20^\circ W.$ , and the traces along the face of the hills, whose angles traverse to the line, are about  $10^\circ$ . Besides a gully 130 feet wide, four depressions, caused by as many small tributaries of the north fork, occur within the above limits, requiring embankments of 620, 470, 250, and 310 feet elevated, at the highest points, 8, 6, 9, and 4 feet, respectively. These, with excavations to about an equal amount, necessary to straighten the trace, will constitute the principal items of cost in the grading. The soil, though stony with the exception of the first half mile, is loose, and susceptible of cultivation, about one-half being already appropriated to that purpose.

II.  $3\frac{1}{2}$  miles and 59 feet—*ascent 48.740 feet, or 12.547 feet per mile.*—This section, continued along the east face of the valley of the north fork, extends to the further side of the depression near Merritt's having crossed previously those at McClellan's and the widow Parson's. The valleys upon either hand of Wilburn's are sufficiently high for the reduced elevation assumed for the road. These valleys, taken in the order of their locality, may be crossed by embankments 350, 510, and 630 feet long, and at the greatest elevation of 21, 22, and 23 feet, respectively. Besides these, there are

three or four narrow ravines, but of so little importance as not to affect the trace. The transverse inclination of the ground averages here about  $1^\circ$  and seldom rises above  $2^\circ$ . The soil, though stony nearly throughout, is easy of excavation. Rock seldom appears. The entire distance, save half a mile, is cultivated. For the first half of the section the course is  $N. 3^\circ W.$ ; it then changes to  $N. 10^\circ W.$

III.  $2\frac{1}{2}$  miles and 133 feet—*ascent 67,545 or 4,339 feet per mile.* This section closes the third division, by reaching the head of South creek. The trace is made upon courses of nearly equal lengths, of  $N. 15^\circ W.$ ,  $N. 35^\circ E.$ , and  $N. 10^\circ E.$  and from the uniform character of the valley, is uninterrupted by a single indentation of any importance. The cross slopes, however, here increase to  $14^\circ$  as the average, and rise more frequently above  $20^\circ$ , than lower down the valley. The stony soil, with the exception of the last mile and a quarter, still prevails. Five-eighths of a mile only of this section is cultivated, the remainder is wooded.

#### FOURTH DIVISION.

*From the South creek summit, (north fork of Sugar creek and South creek,) by the valley of South creek, to Elmira,  $1\frac{1}{2}$  miles and 351 feet—descent 508,500 feet.*

This division is by the valley of South creek, until it spreads out into the extensive flats on the Chemung river, and thence, across these flats to Elmira. It has, upon rather a circuitous course, a direction about north. Unlike that of the Lycoming, the valley of South creek falls with greater rapidity as the mouth is approached. This inclination, which in the latter, is barely sufficient near the head for the proper drainage of the ground, is in some places, so great below, as to render the bottoms no longer applicable to the purposes of the road, having regard to locomotive power. These instances, however, as in the case of the Lycoming, may be avoided by resorting to the high grounds, and there disposing the excess over a greater space. In the valley of South creek, this resource, from the moderate inclination of the elevated grounds which skirt the bottoms, would be attended with very little additional expense over that of constructing a road in the bed of the valley, as in many instances they ascend by smooth and almost imperceptible swells. In this respect, and also in a greater absence of rock, the valley of South creek possesses a decided advantage over that of the Lycoming; throughout which, in every instance where it was deemed advisable to leave the bottoms, the country presented the most formidable difficulties in the impracticable character of the hills, both as regards steepness and the material of which they are composed.

The bottoms upon South creek have a breadth of from 150 feet to a quarter of a mile, through which the stream flows by a devious course, varying in width from 5 to 60 feet. They are singularly contrasted with those upon the Lycoming and the north and south forks of Sugar creek, which, contracting near the sources of the streams, disappear, or nearly so; whereas, in the instance of this valley, there is no important difference in the breadth between the head and entrance. These bottoms, for the most part, are swampy, or broken up into numerous channels by freshets, with cultivated portions above their reach. Wherever the swampy character prevails, the inclination of the valley is slight; where broken, it is from an increase of declivity, giving to the stream a corresponding increase of velocity and influence upon its banks.

I.  $2\frac{1}{2}$  miles and 22 feet—*descent 32,055 feet, or 8,634 feet per mile, for  $1\frac{1}{2}$  miles and 402 feet, and 13,268 feet per mile for  $1\frac{1}{2}$  miles and 280 feet.*—The line traced by the survey was upon four courses of nearly equal lengths,  $N. 20^\circ E.$ ,  $N. 2^\circ W.$ ,  $N. 15^\circ E.$ , and  $N. 5^\circ W.$  The first and second skirt at the foot of the hills, having slopes of  $15^\circ$  deg. upon the east side of the

swamp and marsh which form the commonhead of South creek and north fork of Sugar creek. The third crosses the flats obliquely, to gain the west side of the valley, and thence, by the fourth, down the middle of the bottoms, to the end of the section. The best location will probably present itself on the east side, to the lower end of the marsh, above which the grade will place the road some 3 or 4 feet. It is then desirable to reach the hills on the west side, by a continuation of the course nearly north, as the road by the grade, is removed from 5 to 13 feet above the bottoms. Having gained the west side, the trace for the remaining distance is along side slopes ranging at 15 deg. The bottoms in this section are from 269 to 1,080 feet wide, the creek from 5 to 15 feet.

II. *4½ miles and 360 feet—descent 106,155 feet, or 24,583 feet per mile.*—This section, commencing just above Mill brook, extends to Philo Fossett's, about one third of a mile above the bridge by which the main road crosses the stream. The valley lies upon the three courses, N. 79° 30' E. and N. 57° E. and N. 7° W. making the route here rather circuitous. The bottoms, from 200 feet to a quarter of a mile wide, are cut up into numerous channels, where the descent of the stream is rapid, or subsides into swamps as the inclination becomes more moderate. The extent of this irregularity may be gathered from the fact that, in 1½ miles and 60 feet, near the head of the section, the ground falls 73,035 feet, or at the rate of 62,604 feet per mile; so that, even if the bottoms were otherwise available, their inclination would be sufficient of itself to forbid their use, having in view the desire entertained from the first—the adaptation of the entire route to locomotive power. It is proposed therefore, to carry the road along the hills on the western side of the valley, with grades which shall conform as nearly to the one given as the ground will permit. The ground is favorable for such a location, being intersected by no tributaries of the main stream of much importance, and seldom rising at angles greater than 20°. The soil generally, is of easy excavation.

III. *2½ miles and 8 feet—descent 76,310 feet, or 30,506 feet per mile.*—N. 26° W. is the course of this section, which is straight. The given plane is nearly coincident with the natural inclination of the valley, the bottoms of which are very much broken into channels by the stream during freshets, above the reach of which, a few feet elevation will be sufficient to place the road in security. The proper trace for this section, is upon a straight line for nearly half a mile, to a point on the stream about 800 feet below the bridge near Evan's mill, where it proposes to cross, following the east side down to the commencement of section IV. The double crossing of the stream, shown by the survey in this distance, may be readily avoided by determining the final trace. The bottoms in this section are reduced in some places to a breadth of nearly 150 feet, and in others expand to nearly a quarter of a mile. The creek is from 25 to 60 feet wide. This section terminates 150 feet beyond James Bird's.

IV. *3 miles and 641 feet—descent 150,300 feet, or 48,151 feet per mile.*—This section carries the line to the broad flats which extend to the Chemung. It has a general direction of N. 30° W., combining the four courses N. 21° 36° 37° and 3° W. In giving uniformity to the plane of inclination, the road will be removed to the slopes of the high grounds, and to a height of from 5 to 15 feet above the bottoms—a great advantage when the character of a large portion of them is considered. A final trace will avoid all the crossings shown by the survey, except one in the vicinity of Snyder's. The object of this crossing is, to enable the line to pursue the benches and side hills upon the west side, in order to cross Seeley's creek, before it separates into numerous branches, which a line further east would have to encounter. In the whole of the previous distance, the road should occupy the east side.

The hills have moderate slopes, except where they show themselves upon the bottoms, in the form of banks, which occur for a large proportion of that part of the section which lies upon the east side of the stream. These banks are from 10 to 40 and 50 feet high, and rise at angles of about 45°. The breadth of the bottoms in this section, varies between 240 feet and a quarter of a mile; and the creek, between 30 and 60 feet. Seeley's creek is passed with 160 feet, and at an elevation of 10 feet.

V. *2½ miles and 320 feet—descent 43,680 feet, or 18,904 feet per mile.*—This section extends across the flats, to within about a quarter of a mile of the Chemung. By making a cut through the bench nearest the river, of 10 feet, which would yield sufficient materials for the slight embankment, the grade may be readily maintained throughout the section. The length of such a cut would be 2,550 feet, with an average depth of less than six feet, through a loose stony or gravelly soil. N. 23° 45' E. is the course of this section.

VI. *½ mile and 320 feet—level—Elmira, N. Y.*—This distance terminates the route, by reaching the entrance of the Chemung canal at Elmira. For a quarter of a mile and 100 feet the line is continued to the bank of the river, on the same course as section V, and with a grade nearly coinciding with the natural surface of the ground. It then assumes a direction of N. 7° 0' E. to the canal, crossing the river at an angle of about 70°, thus increasing the distance over a line at right angles to its course, about 60 feet; a direction, which, from the very favorable character of the ground opposite Elmira, may be readily given to the trace, whenever the point of termination of the road shall be decided upon. A viaduct for the Chemung, by the survey, would have a length of 880 feet, crossing two channels of 330 and 280 feet respectively, and an island of 270 feet. The level of this island is 3,540 feet, and of the river at the low stage 16,175 feet below the grade.

Having gone through the details of the route, the following table is annexed, exhibiting a condensed view of the length and inclination of the several grades therein proposed.

It is not considered within the province of the present report to make more than a general reference to the probable cost of the contemplated road. Indeed, with the present sources of information, an estimate would necessarily rest solely upon suppositious data, and as such would be of no practical utility. This will be readily acknowledged by recurring to the nature of the operations, in which the actual line pursued by the survey is, in many instances, necessarily far removed from the trace which will probably be finally adopted, and between which a few points only, will there be a precise coincidence. The survey was in fact purely experimental, to determine the main features of the country through which the road would pass, and sufficient only to decide upon the single question of the feasibility of the project. So far, it is believed, the survey has satisfactorily accomplished the object.

But, although the requisite data have not been obtained for forming an estimate of the probable cost of the undertaking, sufficient information was developed in the progress of the survey to show that a rail-road from Williamsport to Elmira may be executed, without having to contend against any extraordinary difficulties, or those requiring expenditures beyond other works of the same description, traversing similar regions of country. The only operations of real magnitude, and which would require large disbursements in the execution, are those involved in the long planes upon the Lycoming and south fork of Sugar creek; to all of which reference will be made hereafter, when speaking of the partial use of inclined planes in the route. To these may be added the embankments at Shroeder's and Spaulking's mill creek branches; the cut at Pratt's mill

creek; and the bridges over Sugar creek at Long's mill pond, and the Chemung river at Elmira.

Upon the other hand, there are extensive portions of the route that can be constructed as cheaply as any similar work of equal length. The lower division of the Lycoming may be mentioned as a remarkable instance of this description; in which with unimportant exceptions, the trace of a road may be drawn conforming nearly with the natural surface of the ground, and, at the same time, traverse the shortest line from point to point of the valley. It is true that the Lycoming is crossed 15 times in this distance; but, when it is considered that the average length of the necessary bridges is about 120 feet, and that upon the spot are found materials of the best quality and in the greatest abundance, suitable for their construction, the cost under this head will not be deemed very formidable, particularly if wood be used in their superstructure. Of the divisions included in the distance between the Lycoming summit and the head of South creek, (with the exceptions already made,) the same formidable opinion may be expressed; and, also, of the valley of South creek, along which a road may be formed without meeting any formidable obstruction requiring a large expenditure. Upon the whole, the route, as a mountain route, may be considered, as regards inclination of the grades, directness of trace, character of the ground, and nature of the soil, proximity and abundance of materials as peculiarly favorable.

It was not intended, by carrying out in the report the details, with a view to locomotive power, to express any preference for that mode over a system which would combine with it stationary power, as better suited to the features of some portions of the route, but solely to show, by means of the experimental survey, the entire practicability under such a condition; leaving the ultimate question to be decided hereafter upon more comprehensive and minute surveys, which would yield the necessary data for making comparative estimates of the first cost of the work and of the moving power; of the annual expense of maintaining said power, and the necessary repairs under each system; with statements showing the facilities as to time, accommodation, &c. &c. which they would respectively offer; all of which are essential to a proper choice.

That the route in its whole extent is applicable, with but three exceptions, to locomotive power at moderate grades, has been satisfactorily demonstrated by the present survey. These exceptions are upon the Lycoming below M'Nitt's, on the south fork of Sugar creek, and on South creek, between Brd's and the Chemung flats, the former lying south, the others north to the summit level; and which, comprising, respectively, distances of considerable length, upon nearly uniform inclinations, allow of the advantageous application of auxiliary locomotive power, in overcoming the usual inclination of the road at these points of the route.

If, however, the proper investigation should result in favor of the partial use of stationary power, such an application would be confined to the portions of the route above indicated; in which, with the exception of the narrow gorge upon the Lycoming, the ground lies remarkably favorable for the location of the necessary planes. The first cost of the work would doubtless be favorable to such a selection, principally near the summit of the Lycoming, where the grades, by conforming more nearly to the bed of the valley, would avoid the large expenditure necessary to maintain, for some miles along the face of steep and rocky hills, a uniform inclination, in order to overcome the sudden rise in the country at that point; and on the south fork of Sugar creek, where, by the introduction of one or two planes near the head of that stream, the necessity would no longer exist for the deep cut at the summit level, or the high and expensive embankment at the depression of the ridge, forming the east face of the valley of the

south fork; both of which are required under a system of grades adapted to locomotive power.

By the cursory examinations made during the progress of the survey, it was found that the chief materials required in the construction of a rail-road were abundant and accessible at almost every point of the route. Timber, of a number of kinds, suitable for the various purposes of construction in a road of this description, is advantageously found interspersed throughout its whole length. Among these are white and other oaks, white and yellow pine, hemlock, chestnut, walnut, hickory, sycamore, beech, &c. &c., which may be adopted as the growth successively varies, or according to their suitableness to the particular kind of structure. Locust, so valuable as sleepers, is found growing spontaneously along both shores of the west branch, for eighty miles above Williamsport, where it may be obtained at a reasonable rate. Stone of a good quality for the common purposes of a road, and for building, in culverts, bridges, &c. &c., is sufficiently abundant; but none of a suitable kind for the blocks and sills of a rail-road was discovered, though no doubt exists that, upon a proper examination of the country, an ample supply may be obtained of the fit description.

The facility afforded, in the construction of a road, at either end of the line, by the New York and Pennsylvania canals, for the introduction of materials, not convenient, or of the best quality, upon the immediate site of the road, is a consideration which should not be overlooked. The transportation by these channels of the single article of rails, which will probably be obtained from abroad, from the seaport, would form of itself no inconsiderable item in saving, over the ordinary means of conveyance.

In conclusion, it remains for me to express my acknowledgments to Lieutenants Boyce, Irwin, and Drayton, United States army, whose unremitting assiduity brought the survey, forming the subject of the present report, to so early a completion.

Respectfully submitted.

HARIMAN BACHE,  
Brevet Major and Topographical Engineer.

## IMPORTANT DECISION TO MERCHANTS.

OPINION OF THE COURT DELIVERED BY JUDGE BALDWIN.

The United States } On writ of error from the District  
vs. } Court.  
Halberstadt. }

The case in the District Court, was an action brought by the United States to recover from the defendant, a penalty of one hundred dollars, for removing an empty cask which had contained imported spirits, before the marks and numbers which had been put thereon, pursuant to the provisions of the collection act of 1799, had been defaced as directed by the 44th section thereof.

The case was submitted to a jury, who found a special verdict, "that the defendant did remove the cask described in the declaration, without having the marks erased therefrom, and had purchased the same from some person unknown to the jury," on which judgment was rendered for the defendant.

The only question made at the bar is whether the penalty prescribed attaches to the purchaser of such empty cask. The forty-fourth section of the law provides—that on the sale of any empty cask which had contained imported spirits, and before the delivery to the purchaser, or any removal thereof; the marks and numbers which shall have been set thereon, shall be defaced and obliterated in presence of an officer of the customs, at which time the certificate which ought to accompany such cask, shall be returned and cancelled. These are the directory parts of the law, prescribing what shall be done; the clause which inflicts the penal-

ty is. And every person who shall obliterate, counterfeit, alter, or deface, any mark or number, placed by an officer of inspection, upon any cask containing spirits, or any certificate thereof. Or who shall sell, or in any way alienate, or remove, any cask which has been emptied before the marks and numbers have been so defaced, in presence of an officer, or who shall neglect or refuse to deliver the certificate issued to accompany the cask, of which the marks and numbers shall have been defaced, on being required by an officer of inspection of the customs, shall forfeit one hundred dollars. 3 Vol. U. S. Laws, 177.

If the penal part of this section is alone considered, the words "every person who shall remove," &c. would comprehend the purchaser, as well the seller of an empty cask; but in constructing a penal statute, the part which directs the performance of an act, must be connected with that which imposes the penalty for its omission, so that it shall be imposed only on the delinquent party.

"It is (also) unquestionably a correct legal principle, that a forfeiture can only be applied to those cases, in which the means prescribed for the prevention of the forfeiture may be employed." 4 Cr. 363.

The first inquiry is this, what will prevent the forfeiture; next, by whom the acts directed to be done must be performed; and lastly, whether they can be performed by the purchaser.

The first act in order of time, is notice to some officer of inspection or of the customs, to attend at the time of defacing the marks and numbers. 2. The defacing them in the presence of such officer. 3. Returning and cancelling the certificate;—if these acts are done, there can be no forfeiture for the removal of the cask, as every requisition of the law is complied with.

Though the law does not designate the seller, or owner of the cask, as the person who is to do these acts; it does so by necessary implication from the words used, "that on the sale of any cask," &c. "and prior to the delivery thereof to the purchaser, or any removal thereof;" the defacing the marks, and the returning and cancelling of the certificate, are simultaneous acts, which it will be seen by a reference to the 41, 42, and 43 sections, must be done by the owner or seller.

The 41st section directs the surveyor, or chief officer of inspections, to give to the *proprietor, importer, or consignee*, a particular certificate which shall accompany each cask of spirits, the form of which is prescribed.

The 42d section directs the inspectors to make entries of all certificates.

The 43d section directs, that on the sale of any spirits, the certificates shall be delivered to the *purchaser* thereof, on pains of forfeiting fifty dollars for each certificate which is not so delivered. And if any cask containing spirits is found unaccompanied with the marks and certificate, in the possession of *any person*, it shall be presumptive evidence that the same is liable to forfeiture.

As the certificate then must be in the hands of the owner of the spirits, and the cask which contains them, until it has been emptied of its contents, and must be delivered up and cancelled upon the sale of the cask and before its delivery to the purchaser, or removal; it must be done by the person who is bound to have the certificate in his possession with the cask; he is also the person who is to give notice to the officer, and deface the marks in his presence. This person is therefore the owner or seller, who must retain the certificate till the sale, if of a full cask he must deliver it to the purchaser; if an empty one, he must cancel it, or it must be done by the officer before delivery or removal. These provisions of the law point to the owner or seller, as plainly as if he was especially named; they also necessarily exclude the purchaser, as he can in no event be entitled to the possession of the certificate; he cannot return or cancel it; and as the notice to the officer, and defacing the marks, must precede the delivery or

removal, he can have no possession of the cask for such purpose.

There is therefore no one directory provision of this section, which the purchaser is enjoined to perform, nor any duty imposed on him, the omission of which can be deemed a violation of the law; but the law does apply directly to the owner or seller, on whom every duty is enjoined, who has it in his power to perform every act required, and on whom the penalty for omission can and ought to be visited. It would be a severe construction of the penal part of this law, to attach the forfeiture to a purchaser, when he had not the means of avoiding it in his power;—such construction ought not to be given, unless the words are too plain and imperative to be explained, or applied according to the principles of justice. Those used in the penal clause are not of this description—they are, "And every person who shall sell, or in any way alienate, or remove any cask, &c. which has been emptied of its contents before the marks have been defaced as aforesaid," "or who shall refuse or neglect to deliver the certificate, &c. when thereto required by an officer of inspection," shall forfeit one hundred dollars—for what it may be asked. For selling, or in any way alienating, or removing, the cask in violation of the previous directions, which are applicable exclusively to the owner or seller. The prohibition to remove, before defacing the marks, and the penalty for the removal, must have been intended to apply to the same person, not only from the whole scope of the 41st section, but the provisions of the 43d. The latter inflicts a forfeiture of both cask and spirits, if a full cask is found in the possession of *any person*, unaccompanied with the marks and certificate;—this forfeiture attaches to the *article*, in the hands of the purchaser. Now if Congress had intended to attach the pecuniary forfeiture, to the purchaser of a cask found in his possession empty, with the marks not defaced, a similar provision would have been inserted in the next section. Or had the penalty been intended to attach to purchaser, and seller alike, the clause would have been "every person who shall sell or in any way alienate, *purchase*, or remove," and the directory part would have contained a prohibition to the purchaser to receive the cask, in which case the penalty would have been incurred by his disobedience. His omission to provide for the case of any other than the owner or seller of the cask, is a clear indication that the sense of Congress was to include no others within the penal enactments; more especially, when taken in connection with the last, providing for the neglect or refusal to deliver the certificate, which can in no case apply to the purchaser of the empty cask.

Of the four acts which are the constituents of the offence, selling, alienating, removing, refusing or neglecting to deliver the certificate;—there are three, which can be done only by the owner or seller. The removing may be done by the purchaser, but connecting the word "remove," with the context, as well as the two sections, it appears to refer to the same person, who sells or alienates. The clause of the 44th section imposing the forfeiture, follows, the prohibitory clause so closely, as to clearly point out their connection and dependence; every person who removes the cask, incurs the penalty, for not defacing the marks "prior to the delivery thereof to the purchaser, or any removal thereof," or not returning and cancelling the certificate. There is no forfeiture for purchasing, or having in possession, an empty spirit cask, with the marks on it undefaced; the law does not look beyond the sale, or prohibit any act, after the cask is delivered to the purchaser; every duty enjoined is antecedent, and a forfeiture is incurred by every omission, but none can be incurred where no duty is enjoined. The removal merely is no offence, it must be a removal before the marks are defaced, as directed by the law; the means of preventing the forfeiture can be used by the seller, but not by the purchaser; and the latter ought not to

be visited with the default of the former, unless the law would become inoperative by confining it to the owner or seller. Every object in view, seems to be fully effected, by the imposition of one forfeiture for one offence, which is constituted by the one act of removal; by adopting a different construction, the forfeiture would attach to the owner, his agent in selling, the laborer who would remove it from its position, the drayman, the purchaser, as well as every person through whose hands the cask might pass from time to time.—The words of the law do not admit of such successive and cumulative forfeitures; on the other hand, their import is inconsistent with such intention: the phraseology is peculiar—"or who shall sell, or in any way alienate or remove." It is very clear that the person who sells, or in any way alienates or removes, can be no other than the seller,—and that none other can have been within the scope of these words, which were evidently used in order to prevent any evasion of the law by the owner, in alienating or in any way disposing of, removing, or parting with the possession of the cask before complying with the law—although he had made no actual sale of it.

This view of the law makes every word operative, it affixes the penalty to the person who can prevent the commission of the offence, and is the delinquent on whom it ought to be imposed. To extend the forfeiture to the purchaser who cannot sell, or in any way alienate the cask, is not required by the terms of the law, and would bring within its operation, a case not contemplated.

This view of the 44th section, is confirmed by the judicial construction of the 43d, in the Circuit and Supreme Court.

The first clause directs the certificate accompanying a full cask, to be delivered to the purer aser; it is therefore held that the clause imposing the forfeiture, if it is found in the possession of any person without the certificate, refers to the person who has possession as purchaser.

The forfeiture does not attach, if the casks are in possession of a wrong doer, and is incurred only by a violation of the special provision of the law, by a party who has it in his power to comply with its requirements, and all the constituents of the offence must exist in the case. 1 Paine 510, &c. 12 Wh. 487. 10 Wh. 424.

This is considered a highly penal statute, which is not to be extended beyond its express letter, by any deduction from its supposed policy, or be so construed as to impose a duty which the party could not perform. 10 Wh. 424. 5. And the part imposing a forfeiture, will not be enlarged beyond the provisions, for the violation of which it is imposed: 4 Cr. 362. 2—or by the acts or omissions of persons over whom the party could have no control. *Ib.* 365.

The same construction has been given to the 51st section, which imposes a forfeiture of any spirits, which are removed, before the quantity, quality, and proof shall have been ascertained and marked, as directed by law: the removal which subjects the owner to a forfeiture, must be made with his consent, or some person employed by him. 4 Cr. 363. S. P. 10. Wh. 424. 12. Wh. 490.

In the application of these rules to the penal part of the 44th section, it must be referred to a removal made by the owner or seller, from his to the possession of another in consequence of a sale, or some way or mode of alienation or delivery, to a purchaser or alienee, and not to the person who receives it after a purchase.

The judgment of the District Court is therefore affirmed.

From the Pennsylvania Inquirer.

## CLANDESTINE MARRIAGES.

### *An Interesting Law Case.*

SUPREME COURT OF PENNSYLVANIA. }  
Philadelphia, 1835. }

REV. SAMUEL HELFFENSTEIN, } Error to the District  
vs. } Court for the city and  
DAVID THOMAS. } county of Philadel<sup>a</sup>.

David Thomas, the plaintiff below and defendant in error, brought this action against Samuel Helffenstein, a clergyman, for the penalty of £50, for joining in marriage Stephen Thomas, under the age of 21 years, a son of the defendant, to a certain Mary Meredith, without publication of banns, and without a certificate of the consent of the said David.

By the original Act passed in 1700, entitled "An Act for preventing clandestine marriages," it is enacted "that the parents or guardians shall, if they conveniently can, be consulted with before the marriage, and the parties' clearness of all engagements signified by a certificate from some credible person where they have lived, or do live, produced to such religious society to which they relate, or to some justice of the peace of the county in which they live, and by their affixing their intentions of marriage on the Court House or Meeting House doors in each respective county where the parties do reside or dwell, one month before solemnization thereof; the which said publication, before it be so affixed as aforesaid, shall be brought before one or more justices of the peace, in the respective counties to which they respectively belong; which justice shall subscribe the said publication, witnessing the time of such declaration, and date of the said publication so to be affixed as aforesaid"!!

By the same act if any person should presume to marry, or be accessory to any marriage, without a previous publication of the intent to marry, the person married was subject to a penalty of £20, and every witness present at such marriage, to a forfeiture of £5, and to damages to the party grieved.

Marriages in religious societies are excepted out of the Act provided notice be given.

It is very obvious that such a law could not be efficient—as, instead of punishing those who joined others in marriage, it punished the party married—as if a penalty of £20, though to pay it might probably absorb the united fortunes of the married, would from marriage deter lovers for ever. In the simple state of society when the Act was passed, people did, however the case may be at the present day, frequently marry from love. There was, however, often then, as in the present case, another inducement to marriage—*bitter cold weather*; for, when two lie together, then they have heat; but how can one be warm *alone*? Ecclesiastes, c. 4. v. 11.

The law having been eluded, to remedy the evil, a supplement to the original Act was passed in 1829–30; the first section of which enacts, "that no person or persons shall presume to publish the banns of matrimony, or intentions of marriage, between any person or persons, in any church or chapel, or other place of worship, unless one of the parties at least, live in the town, county, or city where such publication shall be made, and unless the person or persons making, or causing to be made, such publication, shall have received a certificate of the consent of the parent, guardian, master, or mistress of the parties, who ought to give such certificate, live within the province."

By the second section it is enacted "that if any justice of the peace, clergyman, minister, or other person shall take upon him or them, to join in marriage any person or persons, or if any justice of the peace shall be present at, and subscribe his name as a witness to any marriage, without such publication being made as aforesaid, such justice of the peace, minister, clergy-



man, or other person taking upon him to sign, make, or cause to be made, any publication contrary to the directions of the Act, or shall marry or join in marriage, any person or persons not published as in the original Act, and this Act (the supplement) is directed, every justice of the peace, clergyman, minister or other person so offending, shall for every such offence, forfeit the sum of fifty pounds, to be recovered by the person or persons grieved, if they will sue for the same."

Section third.—Marrying in religious societies not forbid by the Act, so as notice be given, &c.

The Jury having given the plaintiff a verdict for the penalty, the defendant sued out a writ of error, and the following errors, founded on exceptions to the charge of the Court to the Jury, were assigned:

The Court erred in charging—

1st. That so much of the Acts of Assembly, of 1729—30, as requires the publication of banns, or intention of marriage, is not obsolete, and is applicable to the present day.

2d. In charging—that in the absence of all evidence of an affirmative character, the Jury might presume the banns of matrimony were not published according to the Act of Assembly.

3d. In charging—that it was not material to the plaintiff's recovery to show that the minor was dependent for support on him, and that it was no obstacle in the way of the plaintiff's recovery that the minor, at the time of the marriage, was not so dependent.

4th. In charging—that the defendant would be liable to the penalty of the Act, although the minor was not dependent on his father for support, if otherwise liable, and that the plaintiff, the minor's father, could recover that penalty, even if the Jury believed that the minor, at the time of his marriage, lived away from his father, and supported himself.

5th. In charging—that the Jury might presume that the plaintiff, the father of the minor, was aggrieved, in the absence of evidence to the contrary.

The opinion of the Court was delivered by

GIBSON, C. J.—The notion that the acts of 1700 and 1729—30, are obsolete in their provisions for publications of banns, is a novel one. These provisions were not introduced to serve a particular time or occasion; and they are consequently the law of our day, though capable, as held in *Radebagh vs. Sanks*, of being satisfied by less than the certificates of consent appointed as the statutory substitute for publication. It was held in that case that the penalty is not incurred by the performance of the marriage ceremony without publication or certificate, where the acts and declarations of the plaintiff have been such as may have led the defendant to believe that the marriage was desired by him. But where there was not actual consent, or such indications of it as would make an averment of dissent or fraud, which it is not the policy of the statute to encourage, it never has been doubted that its requirements must have been complied with in order to save the penalty, though not to legalize the marriage.

The next point however was erroneously ruled by charging that, in the absence of proof to the contrary, the jury might presume that the banns were not published according to the statute.

The general rule undoubtedly, is to dispense with proof of a negative, the burthen being cast on him who asserts the affirmative. But to this there are two exceptions; the first where the truth of the allegation is peculiarly within the knowledge of him who denies; and the second, which seems to be the case at bar, where the denial imputes a crime and omission by the party to be charged, and there the legal presumption stands for proof until it is rebutted. The authorities are collected in *Starkie Ev.* 363; to which *Senser vs. Bower*, 1 Penns. 450, may be added. And the presumption operates with peculiar propriety where the negative is a constituent part of the offence, instead of

its opposite being a ground of exemption, as it preserves the maxim, that the accused is to be held innocent till proved guilty, from being inverted.

The case of a penal action for sporting without the requisite qualification, though apparently irreconcilable to the spirit of these exceptions, is not so in fact, because the qualification to keep a gun, operating by way of exception out of the general implication of criminality from an act which, if done without a personal license, would be unlawful, must be shewn by the accused as a special justification, though it would be otherwise if the want of it, as here, were a constituent part of the offence. The distinction implied by these instances is certainly a subtle one, and it is not easy to define its properties with certainty or precision, but they are all resolvable into this: where the prohibition is general with an exception in favor of persons, a party who claims the benefit of the exception must bring himself within it; but when the prohibition is special in reference to the circumstances, the party alleging criminality, must show the existence of those circumstances, even of a negative quality, on which alone it can depend. But though the burthen of negative proof rests on the plaintiff in the case at bar, want of publication may be shewn by slight circumstances, such as suddenness and privacy in the concoction of the marriage.

The second and third points involve the supposed necessity of service and dependence on the plaintiff, as the foundation of the action. Were this penalty like damages for seduction, demandable but on the relation of master and servant, there might be a colour for this part of the defence. But even the action on the case has been sustained where the daughter was in the employment of another, the father having retained the right to controul her person. The action here, however, is founded on the relation of parent and child, which may survive a state of service and dependence; for the remission of a father's right to the earnings of his child, though undoubtedly binding, is not an abandonment of his parental rights or duties in respect to marriage or settlement of the child in life, and an obstruction of these is the very injury in reical for which the penalty is provided as was recently determined in *Donahue, vs. Dougherty*.

In that case, too, it was determined that the law implies injury to the plaintiff without proof of actual damage; and that where the requisitions of the act have not been complied with, the officiating party proceeds at his peril.

Judgment reversed, and a venire de novo awarded.

V. L. Bradford for the plaintiff in error; Grinnell for the defendant in error.

From the State's Advocate.]

#### MONUMENTAL CEREMONIES IN HONOR OF THE LATE COL. JOHN KELLY.

On Wednesday the 8th day of April, 1835, agreeably to previous arrangement, a splendid monument, purchased by his relatives, was erected in the Presbyterian Burial Ground in the Borough of Lewisburg, to the memory of the late distinguished and beloved Col. JOHN KELLY, of Kelly township, Union county. We have seldom witnessed a scene more grand, more imposing, and yet more solemn. The companies of Cavalry, two of them from Northumberland, and one from Union county, together with three companies of Infantry, formed the military part; and a host of Ladies, with several hundred citizens and strangers, composed the civil—comprising a grand and very extended procession. We will give the proceedings in their regular order.

After the ceremony of erecting the monument had been gone through with, JAMES MERRILL, Esq. the chosen orator for the occasion, delivered an Address,

from which we derive the following particulars respecting the deceased.

"Col John Kelly was born in Lancaster county in this State in February, 1774. After the purchase from the Indians in 1767, and before the opening of the land office in 1769, he came to Buffalo valley, then a part of Berks county. Here he suffered all the hardships and privations, which are inseparable from the first settlement of a new country. He was tall, about six feet two inches in height, vigorous and muscular, with his body inured to labor, as to be almost insensible of fatigue, and a mind so accustomed to danger that dangers ceased to alarm. In the prime of manhood, and in the vigor of health, with intelligence to understand correct principles, and with firmness to adhere to them; it may be well supposed that he took a commanding position among his fellows. He was a captain and a major at twenty-seven years of age, and when his country called on her sons to save her from the fangs of a tyrant, he was ready. At the very darkest period of the revolutionary war, when all was lost, but honor and hope; and when hope was almost buried in despair, in the fall of 1776, he volunteered to assist in the protection of New Jersey. He was present at Trenton, when the Hessians surrounded, and assisted in that most masterly movement on Princeton; by which the chain of communications of the enemy was broken; all their plans deranged: and their army compelled to return to New York and its neighborhood, and to leave New Jersey free to avenge her wrongs. When we consider the depression of public spirit, how public confidence in the final success of our cause was shaken by the battle of Long Island and the loss of Forts Washington and Lee, with most of our military stores; when we consider that at one time the American army numbered less than 2,000 men; we would not think it wonderful, if all should have been given up for lost—and so it would if the stake had been less. But our people believed, they had no right to abandon their cause of liberty. They were bound to protect it for themselves; and upon their success depended the freedom of their posterity. They must decide, whether, or not, their children should be slaves. They must decide, whether, all people must bow their necks to the iron yoke of despotism; or whether they might anticipate a time, when free institutions should prevail through the world. Our friend and his confederates of that day might have retired into an ignoble and contemptible security. They might have said, what is New Jersey to us? We have homes and firesides, which may be endangered. But they argued better—if we should refuse to come to the rescue, we cannot expect security. We cannot propitiate the monster Tyranny by shrinking from our duty.—Influenced by these considerations our friends went to the rescue of our sister state.

Our friend joined the army fully resolved to do his duty. Then was the time to test his vigor of body, as well as the firmness of his mind. For 3 days at one time, there was no regular service of provisions and for more than thirty-six hours, at another time, they were constantly on the march or in action without a moment's sleep or giving up their arms. In the course of one of their retreats, the Commander in Chief through Col. Potter sent an order to Major Kelly to have a certain bridge cut down to prevent the advance of the British who were then in sight. The Major sent for an ax; but represented, that the enterprise would be very hazardous. Still the British advance must be stopped, and the order was not withdrawn; he said, he could not order another to do, what some might say, he was afraid to do himself; he would cut down the bridge. Before all the logs on which the bridge lay were cut off, he was completely within the range of the British fire, and several balls struck the log on which he stood. The last log broke down sooner than he expected, and he fell with it into the swollen stream. Our soldiers moved on, not believing it possible for

him to make his escape. He, however, by great exertions, reached the shore through the high water and the floating timber, and followed the troops—encumbered as he must have been with his wet and frozen clothes, he on his road made a prisoner of a British scout, an armed soldier, and took him into camp. What did Curtius more than this? If such an instance of devoted heroism had happened in Greece or Rome, the day would have been distinguished from all other days. A medal would have been struck, and every means used to secure the everlasting remembrance of such a deed. In England such a man would have been made a Knight or Lord with the thanks of Parliament. In our poor devoted land such instances were too common to receive especial notice.—History mentions that our army was preserved by the destruction of that bridge; but the manner in which it was done, or the name of the person who did it, is not mentioned. It was but one of a series of heroic acts, which happened every day; and our soldiers were then more familiar with the sword than the pen. As we have met to erect a marble Tomb over the remains of that individual, it is right for us to bring out this act into more bold relief.

Let it be borne in mind, that at this time no arrangement had been made respecting prisoners—that the British Commanders only admitted, that they arrested rebels, and not that they took prisoners of war. Thus all who fought on our side in addition to the common dangers of war, might expect, if taken, to suffer an ignominious death. After his discharge, Major Kelly returned to his farm and his family, and during the three succeeding years, the Indians were troublesome to this then frontier settlement. He became Colonel of the Regiment, and it was his duty to keep watch and ward against the incursions of hostile Indians, through our mountain passes. At one time our people were too weak to resist, and our whole beautiful country was abandoned. Col. Kelly was among the first to return—for at least two harvests, reapers took their rifles to the fields, and some of the company watched, while others wrought.—Col. Kelly had the principal command of scouting parties in this valley, and very often he was out in person. Many and many nights, has he lain among the limbs of a fallen tree to keep his self out of the mud without a fire, because a fire would indicate his position to the enemy. He had become well skilled in their mode of warfare. One circumstance deserves particular notice. The Indians seemed to have resolved on his death, without choosing to attack him openly.—One night he had reason to apprehend that they were near. He rose the next morning, and by looking through the crevices of his log house, he ascertained that two, at least if not more were laying with their arms, so as to shoot him, when he should open his door. He fixed his own rifle, and took his position so that by a string he could open the door and watch the Indians. The moment he pulled the door open, two balls came into the house, and the Indians rose to advance; he fired and wounded one, and both retreated. After waiting to satisfy himself, that no others remained, he followed them by blood; but they escaped.

Fellow citizens, may such examples enable us to duly appreciate the worth of what cost so much.

For many years Col. Kelly held the office of a magistrate of the county. In the administration of justice, he exhibited the same anxiety to do right, and the same disregard of self gain, which had characterized him in the military service of the country. He would at any time forgive his own fees, and if the parties were poor, pay the constable's cost to procure a compromise. While by industry and economy his own pecuniary circumstances were comfortable and easy, he seemed to desire the prosperity of every man, and most anxiously to desire, that all neighbours should be friends. No man ever in vain sought his interposition

to reconcile conflicting interests, to soothe angry passions, to stand, as the defender and protector of the poor man, the widow and orphan.

Towards the end of a long and active life, Col. Kelly became by disease incapable of much motion and seldom left his home. He seemed to be retiring from public view, and preparing to leave this world when he should be called. He had that true characteristic of bravery, an indisposition to fight his battles over again, and that feeling of humility, that where a man has only done his duty, boasting has no place. It is in some measure owing to this reserve that our notice of his life must be so brief and so imperfect. He seemed not to know, that other men would have done differently from him; but to believe, that whatever distinguished him from others, arose mainly from the circumstances under which he acted. We are of another generation, and his contemporaries have either gone down to the grave, or through lapse of time failing faculties are unable to give particular details. From himself, but a few gleanings from a life long and full of incidents, have been obtained.

From the Pennsylvania Inquirer.

#### AFFAIRS OF THE COUNTY—REPORT OF THE COUNTY BOARD.

At a meeting of the County Board held pursuant to law, on the 20th April, 1835, *Abraham Miller, Esq.* was called to the chair, and *T. S. Smith, Esq.* was appointed secretary.

**Present**—Messrs. Miller, Hassinger, Spackman, Stokes, Baker, Lewellen, Peltz, Mather, T. S. Smith, Hanly, Rheiner, Paynter, and J. B. Smith. The County Commissioners laid before the Board an estimate of the county disbursements for 1834. Mr. Mather moved that when an adjournment took place, it should be till Thursday ensuing at three o'clock. Mr. T. S. Smith moved that the County Commissioners furnish the Board with the accounts necessary to ascertain the accuracy of the estimate for 1835. **Adopted.**

Mr. J. B. Smith moved that the estimates be referred to a sub-committee, with instructions to report to the next meeting, and that the accounts before ordered, be furnished to the committee—carried, and the Chair appointed J. B. Smith, G. N. Baker, and L. Paynter, the sub-committee.

Adjourned till Thursday afternoon at 3, P. M., when the Board again met.

**Present**—Messrs. Miller, W. B. Reed, Rheiner, J. B. Smith, Mather, Helfenstein, Hassinger, Paynter, Leston, T. S. Smith, Peltz, and Lewellen. Mr. J. B. Smith from the committee appointed at the previous meeting, made a report, accompanied with a resolution, that the sum of \$343,634 28 be raised by tax at the rate of 75 cents on every \$100 of the county rates for the year 1835—adopted. A certificate in accordance with the resolution was signed, and filed with the County Commissioners. We subjoin the report:

The Committee appointed to examine the estimate submitted to the County Board, by the County Commissioners, on Monday the 20th day of April—

#### REPORT:

That they have had the same under consideration, and that the importance of raising by direct tax nearly \$600,000 from our citizens, who are holders of Real Estate, for County purposes, alone, for the present year, has induced them to endeavour to procure such data as were necessary to form a correct opinion as to what amount should be expended on the different items reported to the Board, by the County Commissioners. They accordingly inquired of these gentlemen for the balance sheet for the year 1816, or for any one year from that time, to 1836, the object of which was to ascertain what amount of money had been raised,

and on what objects disbursed, when the tax was 30 cents in the one hundred dollars, when the tax was 34, and when the tax was 40 cents.

But your Committee regret to say, to these queries no satisfactory answer could be obtained—it was said Mr. Roderfeld, who is the clerk, was sick, and as it was high time the rate of County tax should be fixed for the year 1835, they felt it to be their duty to proceed without delay, and in accordance with this arrangement, they went into a minute examination of every item set forth, in order to ascertain whether a more economical expenditure could not be recommended: And to that end they will notice the estimate submitted, in the order there set down, previous to which they cannot refrain from stating, that the demand of one hundred cents in the hundred dollars is not only much larger than could have been anticipated—inasmuch as a loan of nearly half a million has recently been allowed, and made for the purpose of paying the debts contracted by the former commissioners, and when it is considered that when the above named sum is raised, there will still be a deficit of upwards of 120,000 dollars for the current expenses of the present year—your committee are constrained to say, unless laws be passed checking in a great measure the unrestrained waste, and the extravagant expenditure of the public money, Real Estate will have to bear still heavier burdens—this however by a judicious policy which it is believed may be adopted, will be avoided. Your committee are not surprised that those who are watchful of their personal interests, relinquish investments in Real Estate, which are subject to and must, under existing laws, bear all the burdens of taxation for county purposes, and turn their attention to stocks and other personal securities, which are free from those onerous exactions. Whilst they acknowledge with pain this state of things, they would recommend that the question as to the amount necessary to be raised and required by the County Commissioners, be met and fairly treated at once.

Item 1. Is \$9000 for House of Refuge, agreeably to the provisions of a recent law. This is correct.

Item 2 & 3. \$830 for carriages, for courts, roads, and bridges—and also, \$763 34 for incidentals; these allowances your committee can find no laws for, and would recommend to the Commissioners to discontinue the practice.

Item 4. Is printing, \$500, which they would recommend to be kept within \$250.

Item 5. Is Elections, \$3000; this seems very high.

Item 6, 7, 8, 9, 10, 11, 12, 13, & 14. Relate to the courts, and amount in round numbers to \$30,500; this expenditure they think excessive, and earnestly solicit all those who are connected with these disbursements, to do all in their power to keep them down.

Item 15. Is fire proof building \$25000—the erection of this work they would recommend be put off for the present, as many charges fall upon this year that will not be required the next year.

Item 16. House of Correction \$17,367 92. This they think is too high and may be curtailed, and they call upon those who have charge of that establishment, to do all in their power to that effect.

Item 17. Is debtors apartment, \$1,712 15.

Item 18. Is Arch Street Prison \$500. As this is for repairs, they would recommend this expenditure be kept within \$250.

Item 19. New County Prisons \$60,000. This being for a permanent improvement, should be borrowed for a term of years, at a rate of interest not exceeding 5 per cent.

Item 20. Eastern Penitentiary is 2,000 dollars; this they think should not exceed \$1000.

Item 21, 22, 23, 24 & 25, consisting of criminal apartments 36 83, stationary 455 20, fuel, oil, &c., 320 81, assessments 12,000, horse stealing 63 44. These cannot be reduced. But item 26, \$3,000, being the

pay of the county commissioners, cannot possibly reach that sum, for if they attend at the office every working day in the year it cannot exceed, according to the provisions of the law, \$2317, which makes a difference of 183 dollars. They are therefore at a loss to know why 3000 dollars should be the estimate for this item when it cannot possibly go beyond the sum aforesaid.

Item 27. Is clerk hire, 2200; this your committee think should not exceed \$1200

Item 28. Coroner 3300 dollars.

Item 29. Solicitor 500 dollars; this they think should not go beyond half that sum.

Item 30. Sheriff 1200 dollars; last year this charge was 882 20, and it may not be more this year.

Item 31. Is Auditors, 2035 81; the law under which they act requires them to work at least six hours each day at two dollars per day; admitting they are employed every day in the year this item cannot exceed 1878 dollars,—and yet this is set down at 2034 81.

Item 32. Commissions to collectors, 18,000; the last year this charge was 12,191 95.

Item 33. Allowances to collectors 6317 21; same as last year.

Item 34. State tax 10 cents per 100 dollars, 45,000 dollars.

Item 35. School fund 67,000. They would recommend to the board of comptrollers the most rigid economy in this expenditure, not that they wish to retard or obstruct their laudable labors in so good a cause, but that it requires the aid of every good citizen to be zealous in his endeavors to lessen these public burdens, which of late have become so great.

Item 36. Survey of Penn township 3000 dollars; they would recommend that 2070 dollars be expended on that object.

Item 37. County Court House 1000; they find there was expended last year for repairs, upholstering, &c. 1293 35; they would recommend that no money be expended this year on that item.

Item 38. Commonwealth of Pennsylvania 375.

Item 39. Treasurer's salary \$1500.

Item 40. Fugitives from justice 50.

Item 41. Interest and discount 7,500; this should not be allowed. The public servants should not be permitted to run the county in debt by borrowing money.

Item 42. Board of Health 15,000 dollars; this item your committee think is by far too large and should be curtailed by wholesome laws.

Item 43. Public roads, \$120,000, which means opening streets; this they would recommend be not allowed, and here your committee must express their entire and unqualified disapprobation of opening and grading streets for the purpose of allowing private companies to make rail roads at the expense of the county; this is another great abuse which the public should frown indignantly upon; an abuse which your committee cannot enforce their objections to in terms sufficiently strong.

Item 44. Bridges \$40,000; they would recommend that no bridges be built this year.

Item 45. Interest on county loan \$23,750; correct.

Item 46. Debts due by the Commissioners, \$74,916.

Item 47. Sinking fund 1-25th part county loan \$19,000.

As it is recommended to reduce the estimate on the following items: 2 and 3

4	\$1,563 34
3	250 00
15	2,500 00
18	250 00
19	60,000 00
20	1,000 00
26	183 00
27	1,000 00
29	250 00
30	317 80
31	166 81
32	6,000 00

36	1,000 00
37	1,000 00
41	7,500 00
43	120,000 00
44	40,000 00

Then \$242,980 95

instead of 589,189 94, being required, the sum of \$46,208 will be amply sufficient for all the legitimate purposes of the county. If these recommendations are attended to, and economy and management pursued by the public servants, the burdens of the county will be considerably lessened, and their debts put in a train of liquidation. As twenty-five cents in the hundred dollars will leave a balance in the hands of the Treasurer, on the first of January, 1836, and 19,000 besides will be at his disposal, being the 1-25th part of the county loan, which they would recommend be put out in some safe investment, in order to sink the debt from time to time, as the case may be. Your committee cannot close this report without urging it upon the County Commissioners, in the most solemn manner, to keep all their expenditures within the provisions of the law, so that those heavy exactions, which they fear real estate will have to bear, may be averted, and the county of Philadelphia once again free from debt.

It is true seventy-five cents in the hundred dollars on \$45,817,905, the amount assessed, will produce but \$43,634 28, instead of \$46,208, yet this arrangement includes and will satisfy all claims of debt against the county, to wit, 74,916, now due and unpaid, together with ample provisions for payment of interest on county loan.

As it appears a large amount of money is due and unpaid, on account of taxes for 1834, it is fair to presume when this amount is collected, and the sum raised for 1835, above mentioned, a considerable sum will remain in the hands of the Treasurer, to meet the demands for the year 1836.

Your Committee recommend the adoption of the following resolution:

That the County Commissioners of the county of Philadelphia, be directed to levy a tax of seventy-five in the hundred dollars on all the real estate in the county of Philadelphia to meet the current expenses for the year 1835.

#### *Bloomsburg, Columbia Co. Pa. May 5.*

The Season has been so remarkably cold and backward in this part of the country, as to retard the growth of vegetation in a remarkable degree; grass and grain are far behind their usual thrift, the earliest blossoms are only beginning to put forth.

We have seen a gentleman from head of Fishing creek, who informed us that on Wednesday last, the snow (which fell the day before) was two feet deep on the North Mountain.—*Visitor.*

**A BEAVER TAKEN.**—A few days since, a Beaver was taken in a trap in the western part of Venango county. He is supposed to have been the last of his species in the northwestern part of Pennsylvania. It was said that he had been known as an inhabitant of the county, the last 30 years, from the fact, that a portion of one foot had been taken off by a steel trap, in which he had been once nearly captured. That he should have remained solitary a number of years, in the vicinity of old haunts, rather than migrate to the far west, where he might have enjoyed the social companionship of his fellows, is matter for sage reflection.—*Crawford Messenger.*

Printed every Saturday morning by WILLIAM F. GEDDES, No. 9 Library street.

The publication office of the Register has been removed from Franklin Place, to No. 61, in the Arcade, West Avenue, up stairs.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.--NO. 21.

PHILADELPHIA, MAY 23, 1835.

No. 984.

## ALLEGHENY PORTAGE RAIL-WAY.

No. 3.

*Report of Samuel Jones, Superintendent.*

### RAIL-WAY.

TO JAMES CLARK, Esq.

President of the Board of Canal Commissioners.

SIR:—At the period of my last annual communication to the Board, the first track of the Portage railroad was reported as nearly completed; but, owing to the setting in of winter, and the early snows of that season, the use of the rail-way was not practicable until the ensuing spring. At that time however, on the eighth of March last, the road was formally opened for public use, and the transportation upon it has continued almost uninterrupted up to this day. With the exception of one death, which was occasioned by the running away of a car on plane No. 1, no accidents of a material character have occurred, whilst the cars were in the charge of the agents of the Commonwealth. Delays and stoppages have been very inconsiderable; and such as have taken place, arose from the necessity of cleansing the boilers of the engines, and making such additions and repairs about the machinery of the planes as experience and utility required. And, in relation to delays, I will here take occasion to say, by way of contradiction to reports which were put in circulation last spring, by some of those interested in transportation, touching the detention of goods on the Portage, that at no time were cars delayed more than one day, and delays even of this kind were very rare.—The whole number of days lost, exclusive of Sundays, during the entire season, do not exceed six or seven. The engines and machinery, from their first trial up to this time, have continued to do their work with great facility, and have fully realized all that was expected from them, as relates to the plan adopted, in the application of stationary steam power upon inclined planes.

The transportation upon the rail way, east and west, has been very extensive, considering that this is the first season, and, comparatively speaking, one of experiment, rather than profit. The results, when communicated to the Board by the proper officer, will doubtless be gratifying, not only to them, but to every citizen of Pennsylvania who feels an interest in the completion of the *main line* of our internal improvements.

A second track of rail way upon the Portage having been authorized by the Legislature, the work, by the direction of the board, was put under contract on the thirty-first of May last. The contracts were allotted to good bidders, generally, and at fair prices; and the work has progressed with great rapidity. Out of the whole forty-six sections allotted, but one has been rendered liable to forfeiture. A great number of the sections are now ready for the iron, and on some of them the rails are now being laid; and I anticipate, if the iron is received in season, the whole of the rail way may be completed this year.

The length of the second track, or that portion of it

upon which edge rails are now to be laid, is about twenty-eight miles and fourteen hundred yards—the remaining distance, required to make up the entire length of the Portage, (36, 69-100 miles,) having been made under former contracts for laying the first track, and is embraced in the sidings and double tracks on the inclined planes, and at the basins at Johnstown and Hollidaysburg.

The whole of the second track at present under contract, except a small portion of sections Nos. 11, 29, 39, and 42, where there are heavy embankments, and parts of sections Nos. 1 and 46, on the basins, will be laid on stone blocks, similar to those used in the first track. In the curves, however, where the radius is less than 955 feet, stone sills, running across the track of every nine feet, have been adopted. This measure will render the rail way, at the several points of curvature, extremely solid and durable, and prevent the possibility of later-l separation. Upon the embankments above mentioned, the edge rails will be placed upon timber, connected by locust ties. The whole extent of the latter kind of road in the main track, will scarcely exceed six hundred feet.

The following are the quantities of iron materials required for the second track:

	tons.
Edge rails, 16 950 bars, 18 ft long, weighing 1,793½	
Chairs, 101,420 weighing 620	
Pins, 202,840 “ 41 1-5	
Wedges 101,420 41 1-5	
Flat rails, about 40	

The contract for the edge rails was entered into in London, on the 5th of June last, and through the industry and exertions of the manufacturers, the whole quantity required was made and shipped for Philadelphia, as I understand, by the 6th of September. The Iron is of an excellent quality, and owing to the attention of Mr. Snyder the Commonwealth's agent in England, it has been manufactured in the best manner in every respect. The bars are all eighteen feet in length and weigh about thirty-nine and a half pounds per yard.

As much has been said and urged by many intelligent and respectable individuals, against the propriety of sending to a foreign country for our Iron, when it is one of the staple commodities of our own State, and where it is manufactured to a greater extent, than in any other part of the Union; it may not be improper to remark here, for the information of those who may not be aware of all the facts connected with the subject, that setting aside the very great difference of cost in favor of English rails, and their exemption from custom house duties, there is no one establishment in the United States, that could manufacture the quantity required for the second track of the Portage in a less time than twenty-four or twenty-seven months—whereas at one house in Wales (Ebervale) the whole amount was fabricated in about twelve weeks.

The cost of the edge rails per ton, of two thousand two hundred and forty pounds, as per contract, is eight pounds sterling—being seven'teen shillings and six

pence more per ton, than the cost of that for the first track. This advance in price was owing to the increased demand for Rail road Iron in the United States. I have been told that a short time previous to making our contract, rails had been sold in England at eleven pence.

The cost of a ton of edge rails delivered on the Portage, including all the incidental charges, is estimated at about sixty-eight dollars and nineteen cents.

Of the sixteen thousand nine hundred and fifty bars of edge rails contracted for, fourteen thousand five hundred and eighty-six, have arrived at Philadelphia, and as arrangements have been made for the transportation of the rails from the Delaware, thirteen thousand nine hundred and ninety-eight bars have been ordered for delivery upon the Portage, a great part of which is already delivered, and the balance in the hands of the carriers, and on the way. Should the remaining two thousand three hundred and sixty-four bars now at sea arrive, as expected, in the early part of November, there is no doubt but that we shall have the entire quantity, delivered, distributed and laid on the several sections of the road in good season. The whole cost of the edge rails when delivered on the road, is estimated at one hundred and twenty-two thousand and three hundred dollars.

The cast iron chairs for the second track, have all been made in this country, as they can now be afforded by the manufacturer at a price not exceeding that attendant upon the purchase of those made in England. The average contract price which I now pay for American chairs is about fifty-five dollars and ninety-three cents per ton of two thousand two hundred and forty pounds. These chairs are made at Blairsville, Johnstown, Jackson Furnace in Bedford county, and at Lewistown. A large portion of the chairs have been cast and delivered. The estimated cost of the whole number required for the second track, is thirty-two thousand nine hundred and fifty dollars.

The pins and wedges have been contracted for at Pittsburgh. The pins are delivered on the road at five seven-eighths cents per pound—and the wedges at six cents per pound. These prices are somewhat less than those of similar materials from England, when delivered. The estimated cost of the pins and wedges, is ten thousand seven hundred and fifty-two dollars.

As the board have deemed it advisable to place locomotives upon the Portage, for the purpose of facilitating the transportation, I have, in pursuance of their resolution to that effect, made contracts for the manufacture of three engines. One of them is now making at Boston, and the two others at New Castle, Delaware. The first I presume is nearly completed, and the others are to be done by the 15th of November. We shall endeavor to have them on the road for trial, at the earliest period practicable, after their completion. By the resolution of the board, I was directed to procure five locomotives during the present year, but I found by personal examination that it was not possible to procure that number, in the time pointed out. Owing to the great demand for these engines, the establishments which I visited were generally filled with orders to the extent of their ability to execute for a considerable length of time. It is my intention to have the two remaining engines made at Pittsburgh, and shall as soon as convenient, have one of those now making, carried to that place to serve as a model.

It being intended that the locomotives now constructing, should be used upon the levels adjacent to Johnstown, buildings for their protection and repair, &c. have been contracted for, at that place. Buildings of a similar character will also be erected at Hollidaysburg, and ground for the purpose has been purchased.

Since the last report, two scales for weighing cars

have been erected upon the Portage—one at Johnstown, and one at Hollidaysburg. The platform of each scale is calculated to suspend four cars. Any amount, however, from five pounds to sixty thousand, can be weighed with equal facility and with great accuracy. They cost five hundred dollars each, and were erected by E. T. Fairbanks & Co. of Pittsburgh. These scales are of immense advantage to the Commonwealth, as they not only enable the collectors to ascertain the exact weight of the articles transported, but they serve as an effectual check upon any infringement that might be attempted on the revenue.

At the instance of the principal engineer, I have purchased during the present year, eight new ropes for the inclined planes. These, therefore, with the two extra ones procured last year, will constitute a new set, which will enable us to meet any emergency during the ensuing season, when the two tracks shall be in operation. Having received information of the great superiority and durability of ropes, now in use upon some of the English rail ways, made of New Zealand flax and saturated with a solution of India rubber or gum elastic, I have ordered one of the eight ropes above mentioned, from London, as a matter of experiment. It is now in Philadelphia, and when brought upon the Portage, will be put into use as soon as practicable in order to test its qualities. Should ropes of this character prove, as represented, to be of superior strength and durability to those now used, it will be of great advantage to the Commonwealth to purchase them in future, as they can be delivered in Philadelphia at about twelve and a fourth cents per pound including all charges.

In accordance with a resolution of the board, adopted for the purpose of rendering the rail way more useful and perfect, and to prevent delays which might occur from accidents accruing to any of the steam machinery now in use, ten new engines have been contracted for during the past summer. They are now completed and ready to be put up. All the incidental work connected with the second track, is now principally under contract, and in a forward state, and I have reason to expect that the two tracks of rail way will be ready for transportation by the 15th of March next.

I shall now proceed to state in detail, for the information of the board, the various kinds of work contracted for on the rail way since its commencement, with the present estimated cost of each, the amount paid on them, and the sums yet required to complete the entire road:

#### GRADING AND MASONRY.

Cost of grading as per estimates,	\$472,349 03
Add amount allowed Snodgrass and Durno, on section No. 11, by authority of the Legislature,	5,436 43
	<hr/> 477,785 46
Deduct amount of forfeitures	2,845 10
	<hr/> 474,940 36
Real cost of grading	474,940 36
Amount paid contractors	474,797 48½
	<hr/>
Leaving a sum yet due of	\$142 87½
Cost of viaducts as per estimates	79,755 80½
Amount paid contractors	79,655 29½
	<hr/>
Balance due	100 51
Cost of culverts per estimates	34,319 39½

Deduct amount of forfeitures	76 19
Real cost of culverts	34,243 20½
Amount paid contractors	34,231 7½

Cost of bridge for turnpike	2,327 44
Amount paid contractors	2,327 44

*First Track.*

Stone blocks as per estimates	27,072 15½
Amount of forfeitures	39 75½

Real cost of stone blocks	27,032 39½
Amount paid contractors	27,032 39½

Timber for rail ways as per estimates	47,184 50
Amount paid contractors	47,184 50

Iron edge rails, chairs, &c. (foreign)	170,550 53
Amount paid for the same	170,550 53

Chairs and other castings, (American)	52,315 50½
Amount paid on the same	52,339 00½

Balance due contractors	
Estimated cost of laying rail way, first track	135,776 26½
Deduct amount forfeitures	407 84

Actual cost of laying first track	135,368 42½
Amount paid to contractors	135,168 40½

Balance yet due	
Estimated cost of engine houses, sheds, &c.	66,640 49
Amount paid contractors	66,124 13½

Balance yet due	
Stationary steam engines, actual cost	64,968 00½
Amount paid to contractors	64,968 00½

Cost of ropes for planes	20,531 05
Amount paid contractors	20,531 05

Incidental expenses, including iron work:	
Tubes for wells, &c. &c. and rigger's loft	3,688 05
Amount paid on the same	3,688 05

Repairs of 1st track, previous to the appointment of supervisor	13,391 71½
Amount paid on the same	13,391 71½

*Second Track.*

Estimated cost of edge rails, &c. (foreign)	122,300 00
Amount paid on the same	67,208 54

Sum yet required to pay	55,091 46
Cost of chairs and castings, (American)	32,950 00
Amount paid to contractors	16,020 00

Sum yet required to pay	16,930 00
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Cost of pins and wedges, (American)	10,752 00
Amount paid,	00 00

11 48½	Sum yet required to pay	10,752 00
	Estimated cost of laying second track of rail way	169,934 23
	Amount paid contractors	69,406 00

Balance that will be required	100,528 23
Estimated cost of 2d set of engine houses	17,895 32
Amount paid contractors	5,610 00

Sum yet required to pay	12,285 32
Estimated cost of two set of engines	39,425 00
Amount paid on the same	13,825 00

Sum yet required to pay	25,600 00
Estimated cost of ropes	18,431 50
Amount paid	00 00

Estimated cost of dwellings for weigh-masters, rail way scales, sheds, &c. &c.	6,077 00
Amount paid to contractors	3,295 00
	18,431 30

76 50½	Sum yet required to pay	2,782 00
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*Incidental work and Miscellaneous charges.*

Cost of fencing and removing buildings	2,174 83
Amount paid on the same	2,105 43

200 00	Balance yet due	69 40
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Estimated cost of fencing and clearing lots at inclined planes	1,572 87
Amount paid on account	526 50

516 35½		
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Sum yet required to pay	1,046 37
Miscellaneous charges, including the purchase of materials for rail way, office expenses, &c. since the commencement	10,048 07
Amount paid on these	10,048 07

Estimated cost of fuel for 1834	3,650 00
Estimates paid	2,445 00

Balance required to pay	1,205 00
Expense of engineer department and superintendents ditto, from commencement	54,993 00
Amount expended	52,542 00

Balance due on 1st November, 1834	2,451 00
Salaries of engine and car tenders, and their assistants, at planes	7,401 30
Amount paid to them	5,813 23½

Balance due on 1st November, 1834	1,668 07
Salaries of riggers	1,676 87½
Amount paid on them	1,474 87½

Balance due on 1st November, 1834	202 00
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Estimated cost of depots, machine shops, water stations, &c.	25,385 00
Amount paid on them	00 00
Sum required to pay	25,385 00
Estimated cost of lots to be purchased for engine houses, depots, &c.	1,600 00
Amount paid on them	00 00
	1,600 00
Estimated cost of three locomotive engines and tenders, at present contracted for	18,850 00
Amount paid on them	2,500 00
Sum yet required to pay	16,350 00
The actual and estimated cost, therefore, of the Portage, including grading, masonry, and first and second tracks, three locomotives, and all incidental charges and expenses, is	1,734,134 28½
Of this amount there has been paid	1,444,709 40
Leaving a sum yet to be paid, as per statement above, of	\$393,424 88½
For the purpose of keeping the board fully apprised of the amount of funds provided for the construction of the road, and their application, I again lay before them a statement of the appropriations made by the Legislature.	
By an act of 21st March, 1831, there was appropriated to the Allegheny Portage, and Frankstown line of Juniata canal,	\$700,000 00
From this sum, there was deducted for payment of work authorized previous to the passage of the act of 21st March, 1831, and for the payment of interest, as per act of 30th March, 1831	126,373 48
Leaving, to be applied to the new work to be put under contract,	\$573,621 52
Out of this sum there was set apart by the board, for the construction of the Frankstown canal	380,645 65
Leaving, to be devoted to the Portage, the sum of	192,975 87
Afterwards, on the 10th of March, 1832, there was again deducted from this sum, for the payment of interest	12,975 87
Making the whole sum actually available for rail road purposes, out of the appropriation of \$700,000	180,000 00
By an act of the Legislature, of March, 1832, a further appropriation was made to the Portage, of	620,000 00
Making the whole sum applicable to the rail road	800,000 00
Again, from this amount there was deducted, for the payment of interest, under act of 11th June, 1832	39,581 40

Leaving for rail way purposes, out of the appropriations of 1831 and '32	760,418 60
By the act of 16th of February, 1833, there was a further appropriation of	414,793 06
By the act of April, 1834, another appropriation was made, of	365,486 35
There has also been refunded to the rail road account, the sum heretofore noted as being deducted for payment of interest	39,581 40
Making the whole sum available for the use of the Portage, as per acts of 1831, '32, '33, and '34	1,580,279 41
Now the amount of payments is as follows:	
Amount paid previous to last report	1,041,121 56
Amount paid since last report	403,587 84½
	1,444,709 40½
If then we deduct this sum from the aggregate appropriations, there will remain unexpended	135,570 00½
The estimated amount however, that is required to pay for work under contract, and to meet expenses connected with construction, locomotives, ropes, fuel, &c. exclusive of the charges attendant upon the use of motive power in 1835, is	\$293,424 88
Add for contingencies	8,000 00
	301,424 88
From this sum deduct the amount of appropriations as yet unexpended, and the sum required to be provided by the Legislature, will be	\$165,854 87½
This excess of cost over the estimate of last year, as directed by the foregoing balance, has been caused by additions of work, the purchase of materials, and expenses attending the use of the stationary engines, which items were not included in the estimate of 1833.	
The following will account in a great measure for the excess:—	
Ropes,	\$20,531 00
Repairs,	13,391 00
Depots, &c.	25,835 00
	\$59,757 00
Expenses at stationary engines,	12,481 00
Locomotives,	18,850 00
Incidental,	8,000 00
	39,331 00
Add	59,757 00
Total of new work, &c.	\$99,388 00
The balance of the excess (\$66,766 87) has been created by reason of the prices for work and materials being higher than those estimated by the engineer, in his estimate of last year. For a more full explanation on this subject, I refer the board to the accompanying report of Mr. Welch. I also refer the board to the annexed statement, which will show in detail the estimated cost of the rail way; as also the amount paid previous and since the last report, the amounts due and forfeited, and the sum yet required to pay for work under contract, and incidental expenses, &c. &c.	



TABLE, showing the payments, &amp;c. on the Allegheny Portage Rail Road, since its commencement, November 1st, 1833.

	GRADING.	Amount paid previous to last report.	Amount paid since last report.	Total amount paid.	Amount required.	Amount for-felled.	Estimated cost.
Grading, Viaducts, Masonry, Culverts, Bridges,		\$165,623 00 75,223 05 34,231 72 2,327 44	\$9,174 48 4,832 24 00 00	\$474,797 48 79,655 29 34,231 72 2,327 44	\$142 87 100 51 11 48 00	\$2,845 10 76 19 00 00	\$477 78 79 75 34 59 2,327 44
Stone blocks,	FIRST TRACK.	26,182 06	850 33	27,032 39	00	39 75	27,072 14
Timber,		38,160 00	9,024 50	47,184 50	00	00	47,184 50
Iron, — Rails, Chairs, &c. (foreign), Castings & do. (American),		162,386 69 40,502 14 82,685 00	8,163 83 11,776 85 52,483 42	170,550 53 52,239 00 135,311 53	00 76 50 200 00	00 00 00	179,550 53 52,515 50 135,776 26
Laying rail way, first track,		31,461 00	34,663 13	66,124 13	516 35	407 84	66,640 49
Engine houses, sheds, &c. first set,		25,425 00	39,543 00	64,968 00	00	00	64,968 00
Stationary steam engine, do.		14,587 01	5,944 04	20,531 05	00	00	20,531 05
Incidental expenses, including screw bolts, copper tubes, chains, riggers, loft, &c.		848 50	2,839 54	3,688 05	00	00	3,688 05
Repairs,		00	13,391 71	13,391 71	00	00	13,391 71
SECOND TRACK.							
Iron E. rails and flat bars, (foreign), Chairs and Castings, (American),		00	67,208 54	67,208 54	55,091 46	00	122,300 00
Pins and wedges, do.		00	16,020 00	16,020 00	16,230 00	00	32,950 00
Laying rail way, and materials, second track,		00	69,406 00	69,406 00	10,752 00	00	10,752 00
Engine houses, &c. second set,		00	5,610 00	5,610 00	100,528 23	00	169,834 23
Stationary engines, second set,		00	13,825 00	13,825 00	13,285 32	00	17,895 32
Incidental expenses, including rail way, scales, sheds and drillings,		00	3,295 00	3,295 00	25,600 00	00	39,425 00
INCIDENTAL.					18,431 30	00	18,431 30
Cleaning and fencing lots at planes, Fences, and removing buildings, &c.		00	526 50	526 50	2,782 00	00	6,077 00
Miscellaneous expenses,		1,530 45	574 98	2,105 43	1,046 37	00	1,572 87
Coal for engines,		2,677 97	7,370 10	10,048 07	69 40	00	2,174 83
Three locomotive engines,		00	2,445 00	2,445 00	00	00	10,048 07
Superintendent and engineer expenses,		37,270 50	2,500 00	39,770 50	1,205 00	00	3,650 00
Steam engineers, &c. at planes, do.		60	15,271 50	15,331 50	16,350 00	00	18,850 00
Riggers,		00	5,813 23	5,813 23	2,451 00	00	54,993 00
Loft for depot, and engine houses, &c.		00	1,474 87	1,474 87	1,668 07	00	7,441 30
Depots, machine shops, water stations, &c.		00	00	00	202 00	00	1,676 87
Add for contingencies,		00	00	00	1,600 00	00	1,600 00
		00	00	00	25,385 00	00	25,385 00
		00	00	00	8,000 00	00	8,000 00
Am't of approp'ns available for rail road purposes \$1,580,279 41.		\$1,041,121 56	\$403,587 84	\$1,444,709 40	\$301,424 88	\$3,368 88	\$1,749,563 17

In the foregoing estimates of the cost of the rail way, no allowance has been made for the expenses of the engineer department and that of Superintendent's office for the ensuing season—nor has any allowance been made for the expenses attendant upon the use of motive power, to be employed by the State during the year 1835. These items being distinct from those connected with contracts for materials and construction, I have reserved them for an especial estimate.

The principal engineer has estimated the expense of motive power upon the Portage during the year 1835, at seventy-nine thousand seven hundred and sixty-nine dollars, but this sum includes charges for interest on the cost of locomotives, and the creation of a fund for their renewal, &c. &c. The actual sum, however, according to this estimate, which will be liable to be expended, and which is to be provided by appropriation, should be, I presume, set down as follows:

#### *Stationary Steam Engines.*

Coal, 40 bushels per day—297 bushels equal 11,880 bushels at 4 cents	\$475 20
Oil, 75 gallons at \$1	75 00
Incidental expenses, including tar, tal-low, rope stoppers, &c.	300 00
One engineer of machinery, \$600 per annum	600 00
One assistant do 297 days at \$1	297 00
One car tender at foot of plane, at \$273 75 per annum	273 75
One assistant car tender at foot of plane at 75 cents per day	222 75
One fireman at engine—297 days at 75 cents	222 75
Expense of one plane	2466 45
If we multiply this sum by 10 which is the whole number of planes, the aggregate expenses will be for one year, exclusive of rigger's charges	24,664 50

#### *Rigger's Loft.*

One principal rigger, at \$2 per day 365 days	\$730 00
Three assistant rigger at 1 12½ per day	1,231 87½
Incidental expenses at loft,	350 00
	2,311 87½
Whole annual expense of 10 planes	26,976 37½

#### *Locomotive Engines.*

One engine man, 297 days at \$2 per day	\$594 00
One assistant engine man, 297 day, at \$1 per day	297 00
Fuel at \$4 per day, 260 days	1,040 00
Oil, 75 gallons, at \$1 00	75 00
Repairs,	400 00
Annual cost of working one locomotive	2,406 00
Multiply this by the number of engines constantly in use	3
	\$7218 00
And the total cost will be	
Repairs of two extra engines	\$800 00
One additional engine man and assistant	891 00
Incidental expenses of locomotives	600 00
	2,291 00
Whole annual cost of five engines	9,509 00

#### *Horse Power.*

Fifty-three horses, at 62½ cents per day	\$9,338 12½
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Twenty-four men, (drivers,) at 75 cents per day	5,346 00
Superintendence and contingencies,	800 00
Total annual expense of horse power on 14½ miles	\$15,984 12½

Expense of keeping water stations and depots, &c. in repair, &c. &c.	1,000 00
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#### *Recapitulation of the foregoing.*

Annual expense of stationary steam engines and planes	\$26,976 37
Annual expense of five locomotives	9,509 00
“ “ horse power	15,984 12½
“ “ keeping water stations, &c.	1,000 00

The actual amount, therefore, that will be required for incidental expenses attending the motive power upon the Portage, should locomotives and horses be used, will be	\$53,469 49
To this add estimated expenses of engineer department, &c. for the year 1835	11,362 59
Add also estimated cost of two additional locomotives	13,000 00

The amount to be added, therefore, to the sum heretofore mentioned as being required to complete the rail way, (165,854 87½) will be	77,831 99
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Making the entire sum required to be provided by future appropriations	\$242,686 86
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As regards the motive power to be used upon the Portage, in relation to which the principal engineer has made a detailed report, I am of opinion that the Commonwealth should not become connected with the transportation in any way, beyond the provision of stationary steam power and locomotive engines. It is true, horse power must be used on the short levels between the several planes, but it is a matter worthy of inquiry, whether this power cannot be put in operation at a cheaper rate by the carrier than by the Commonwealth. In my opinion it can.

The hiring or purchasing of horses and the employment of drivers, are matters in which I conceive the State cannot be advantageously connected—and I am the more convinced of this by actual observation every day upon the rail way. If the road consisted of but a single track, there might be a strong inducement for the Commonwealth to employ all the motive power in order to facilitate the transportation—to prevent interruptions, and to regulate the time of arrival and departure with greater certainty; but now as there will be two tracks in operation, the transporters might be left to their own discretion, being governed at the same time by the rules and regulations of the rail way. If the cost of applying steam power, for one year, taking the maximum tonnage at one hundred thousand, be sixty-three thousand seven hundred and eighty-five dollars and thirty-eight cents, as estimated by the principal engineer, and we add to this fifteen thousand nine hundred and eighty-four dollars and twelve cents, estimated as the price for horse power, there will be required to be charged for traction alone, in addition to the tolls, seventy-nine dollars and eight hundredth cents on every ton transported from Johnstown, to Hollidaysburg, and *vice versa*. It is obvious that it is the interest of the State to put the tolls at the lowest standard practicable, for the purpose of inducing transportation—hence the propriety of shunning the employment of any mean or power which may be expensive, and yet not absolutely advantageous or profitable. With these

considerations I would suggest that the motive power employed on the levels, where locomotive engines are not used, be provided and employed by the owners of the cars, or those engaged in the carrying trade, under the directions of the agents of the State.

From the sum, therefore, of two hundred and forty-two thousand six hundred and eighty-six dollars and eighty-five cents, set down as the estimated amount required, I would deduct the allowance for horse power, fifteen thousand nine hundred and eighty-four dollars and twelve cents, and fix the amount necessary to cover all expenses, &c. connected with the entire completion of the rail way, and furnishing motive power by stationary and locomotive engines, at two hundred and twenty-six thousand seven hundred and two dollars and seventy cents.

The number of persons employed upon the several inclined planes, amounts to forty, and at the riggers' loft to five. Their names and stations, as well as those of the engineer corps will be found in detail in table No. 22, of the documents accompanying this report.

The tables, numbered from 1 to 21, inclusive, will afford the board, I trust, the most ample information on all subjects connected with the immediate construction of the rail way.

Of the awards made by the board for damages done by reason of the grading, &c. of the Portage, the following persons have accepted:

Thomas Croyle,	\$190 00
Isaac Hildebrand,	39 00
Willis Gibbony,	25 00

The following awards have been rejected:	245 00
Samuel Duncan,	\$80 00
W. Hileman,	60 00
Samuel S Smith,	55 00
	195 00

Total amount of damages allowed, \$440 00

The several lots to be attached to the houses, or dwellings at the planes, have been surveyed and plotted, and the several diagrams will shortly be transmitted to the board. Titles to these lots generally cannot now be had, as conflicting claims render some of them uncertain, and other are in the hands of executors or guardians.

Respectfully submitted,

S. JONES, Superintendent,

Rail way office, Hollis- Allegheny Portage Rail Road, daysburg, Nov. 1, 1834.

From the Pittsburg Gazette.

#### PENNSYLVANIA CANAL.

COLLECTOR'S OFFICE, Allegheny, 2  
West. Div. Pa. Canal, April 2, 1835.

Whole amount received from 1st November, 1834, to April 25, 1835, as per last weekly statement,	\$7,637 75
Amount received in the week ending May 1st, 1835,	816 48

Whole amount received to May 2d, 1835, \$8,454 23

71 boats cleared, having tonnage,	1,006,073 lbs.
Tonnage received, cleared at other offices,	2,833,500

Total tonnage of the week, 3,839,573 lbs.

The foregoing is the report of the business transacted at the office in Allegheny, during the week, ending the 1st instant.

We felt interested to ascertain the amount of business done at the Allegheny office, up to the first of May, 1834, and to the same day in 1835.

Navigation of the Canal commenced on the 8th of March, 1834, and on the 21st March, 1835.

So that in the former year there was, up to the 1st of May, about eight weeks of navigation, and in 1835, up to the same date, about six weeks. In the eight weeks in 1834, there was received at the office in Allegheny, lbs. 7,590,790

And there was cleared, from the same office, 3,495,933

Total, lbs. 11,086,723

In the six weeks in 1835, there was received at the same office, lbs. 12,410,691

And there was cleared, 6,783,777

Total, 19,194,468

The aggregate increase on tonnage received, and cleared from Allegheny in six weeks of 1835, over eight weeks of 1834, is about 73 per cent.

The increase on tonnage received in these periods, in 1834 and 1835, is about 63 per cent., and on the tonnage sent eastward, about 96 per cent.

This exhibition is altogether gratifying; the total increase is very considerable, and the increase of freight sent eastward is particularly encouraging.

The average tonnage of each week, during 1835, has more than doubled that of the same period in 1834.

The following are the amounts of tonnage received and cleared, during each week of the present season.

	lbs. cleared.	lbs. received.
Week ending March 27,	1,025,784	1,007,320
April 3,	1,038,873	1,264,232
10,	971,874	2,170,150
17,	1,352,220	2,468,877
24,	1,368,526	2,846,612
May 1,	1,006,073	2,833,500

#### DEFENCE OF PHILADELPHIA.

LETTER,

To his Excellency, George Wolf, Governor of the State of Pennsylvania, written at the request of the Military Council of the 1st Brigade, 1st Division, P. M.

Head Quarters, 1st Brigade, 1st Division, P. M. }  
PHILADELPHIA, March 7, 1835. }

To his Excellency, George Wolf, Governor of the State of Pennsylvania.

SIR—In conformity with a resolution adopted by a unanimous vote of the Military Council of the 1st Brigade, 1st Division, P. M.—which is a Board composed of the commissioned officers of the volunteers and militia of the city of Philadelphia,—I have the honor to address your Excellency upon a subject of deep interest to Eastern Pennsylvania, and particularly to the city of Philadelphia.

It is without doubt known to your Excellency, that the Fort of the United States at the Pea Patch, upon which the citizens of Philadelphia have heretofore relied for protection, has been destroyed by fire, two or three years since; and that preparatory to its reconstruction, its walls have been razed to their foundation. It is also within your knowledge, that Fort Mifflin, though long since abandoned by the Government of the United States as a military station, is yet quite tenable as a post, and is susceptible of being made perfectly defensible against a naval force. The War Department of the General Government having in view this object, has ordered its examination by an intelligent officer of Engineers, who has reported favorably to its re-occupation; and has estimated the expense of

its complete repair at \$30,000, and that of its armament, &c. in order to its being garrisoned at \$45,000 more—making in all, the sum of \$75,000.

Deeply impressed with the necessity of making an immediate provision for the defence of Philadelphia, which city from whatever cause, has been left in the most exposed condition, by the adjournment of Congress, without any measures having been taken by that body for its security; I would be doing injustice to the citizens of Philadelphia, generally, and to those whom I more immediately represent, as well as to my own feelings, did I not commend to the serious consideration of your Excellency, the utter destitution of military resources within the city of Philadelphia; its accessible position to an enemy, and its inviting impotence to resist, in case of hostilities. I have therefore, respectfully to suggest to your Excellency, the propriety of your recommendation of an appropriation to be made, by the Legislature of Pennsylvania, of the whole or of such part of the sum, that has been estimated as necessary for the repair and armament of Fort Mifflin, as they in their wisdom shall determine upon—which appropriation should be placed at the disposition of your Excellency, for the most speedy attainment of said purpose. The amount appropriated would doubtless be returned to the Treasury of Pennsylvania, upon the assembling of the next Congress of the United States, and the temporary inconvenience of its withdrawal from the State Treasury, would be more than compensated, by the security which it would afford in its timely application, to an immense amount of property, and to a very large portion of our fellow citizens.

Before concluding this communication, I must invite your Excellency's attention to the subject embraced in the second resolution of the Military Council. It is believed that no considerable part of the fines collected in this Brigade, for the non performance of militia duty, is received into the Treasury of the State. It is thought that should these fines, or a portion of them, be appropriated to the equipment of Volunteer troops, their collection would be more readily effected than it is at present, and that this application of them would serve as an encouragement to the formation and increase of these troops. As the diversion to this object of this money, would be agreeable to our citizens, generally, and without its imposing any burden upon the State, it is hoped that this proposal will receive the approbation of your Excellency.

I have the honor to be,

Very respectfully,

Your Excellency's most obt' serv't,

A. M. PREVOST,

Brigadier General, 1st Brig. 1st Div. P. M.

(ANSWER.)

SECRETARY'S OFFICE. }

Harrisburg, 17th March, 1835. }

SIR—The Governor has received your communication, and the proceedings of the Military Council of the 1st Brigade, 1st Division, P. M. to which it refers.

He has instructed me to inform you that he is much pleased with the patriotic concern for the security of the State, and especially of its great metropolis, which they evince; and that they have received from him that consideration which the importance of the subject, and the respect which he entertains for the body from which they come, justly entitle them.

He does not however conceive it to be his duty to adopt the measures which they suggest. It is for Congress "to provide for the common defence," and the President "may on extraordinary occasions convene both Houses." The President has the best information on the subject of our Foreign affairs, and from the known character of the illustrious individual who now

fills the first office in the Nation, there is no reason to fear that he would hesitate to exercise this power, should the state of our relations with France, or any other country require it. The alteration you desire in relation to the appropriation of the fines for non-performance of militia duty, in your Brigade, is not considered by the Governor, as a proper subject for a special Executive Message. The object may be attained by a direct application to the Legislature.

I am, with great respect, sir, your most obedient servant.

JAMES FINDLEY,

Secretary of the Commonwealth.

Brig. Gen. A. M. Prevost,

1st Brigade, 1st Division, P. M.

Philadelphia.

Signed, A. J. Pleasonton,

Geo. Cadwalader,

Secretary of the Military Council.

From the Philadelphia Gazette.

## PROCEEDINGS OF COUNCILS.

Thursday Evening, May 14th, 1835.

### SELECT COUNCIL.

The chair presented a communication from the Secretary of the Guardians of the Poor, stating that the term of service of Geo. W. Jones, and William S. Hansell, was about to expire, and also that a vacancy had occurred in the Board, by the resignation of Jacob B. Lancaster. Laid on the table.

Petitions for re-paving Morris street, running from Seventh to Eighth street, between Chestnut and Sansom street; and Seventh street, between High and Mulberry, were presented in both Councils, and referred to the paving committee.

Mr. McCreedy presented a memorial objecting to the line of the Delaware Avenue, as now laid out between Chestnut and Market streets. Referred to the committee on Delaware Avenue.

Mr. McCreedy, a petition for the removal of the City Stables, from Barker street. Referred to the committee on cleansing the city.

Mr. Price presented a memorial from the managers of the Danville and Pottsville Rail Road Company, soliciting the aid of Councils in the prosecution of that work. Mr. Chandler, in Common Council, presented a duplicate of the same. Referred to a special joint committee, consisting of Messrs. Price, Eyre, and Lippincott, of the Select, and Messrs. Chandler, Canby, and Yarnall, of the Common Council.

Mr. Price presented the annexed communication from the Association for the relief of Disabled Firemen. Mr. Chandler, in Common Council, submitted a petition of like import. Referred to the committee on Fire Companies.

### To the Select and Common Councils of the City of Philadelphia.

At a special meeting of the Trustees of the Philadelphia Association for the relief of disabled Firemen, held on the evening of the 3d inst. the undersigned were appointed a committee to apply to the Select and Common Councils of the City, for a donation in aid of the funds of the Association. The committee therefore make known to your honorable bodies, that in their opinion, the object for which our Institution was established is intimately connected with the well being of our Fire Department, viz. to provide for the relief of such firemen as may be injured in the discharge of their ordinary duties, or of other persons not firemen, who may receive accidental hurt from fire apparatus. As the firemen are extremely liable to personal injury from

the exposure to which they are subject, and the nature of their operations, it is presumed that an Institution established for their benefit, must serve in a great degree to promote their general usefulness, and to preserve our citizens in that security from the calamity of Fire, for which Philadelphia has long been celebrated. The committee suppose there can be but one opinion, that the preservation of the large amount of property owned by the corporation must naturally be an object of much solicitude to those who represent the public interests. The efficiency of the Fire Department affords a guarantee of no ordinary character, and in the support and maintenance of that Department, all property holders have a deep interest. The liberality of our wealthy citizens and the public spirit of our young men, in maintaining fire apparatus, with but a limited amount of aid from the several corporations of the City and County, give to the Trustees a strong and well grounded assurance that their appeal in behalf of an Institution so intimately connected with the fire department, will not be made in vain. They are confirmed in this assurance by referring to the fact that several members of our Fire Companies were seriously injured by their labours in suppressing, some years since, the fire in the building now occupied by the Select and Common Councils.

The Committee beg leave to remind Councils that the only means upon which we can depend for the creation of a Capital, is the benevolence of individuals and the contributions of our monied and other Institutions. In the City of New York where an association similar to our own has long existed, and having a yearly income at this time of about Eight Thousand Dollars, various sources of permanent and casual revenue are enjoyed, by which the funds have been raised, and yet the corporation of that City but a few weeks since, voted the Society the sum of *One Thousand Dollars*.

From these considerations and circumstances, the committee respectfully present the wishes of the Institution to Councils, in the confident expectation that such aid will be granted as will enable us to promote the noble objects for which we have been chartered.

Mr. Price presented a petition from John F. Johnson, surety with Allen W. Tatem, for the payment of a loan out of the Franklin Legacy, made to Thos. J. Tatem, praying that said Allen W. Tatem may be released, and offering to assume the responsibility himself. Referred to the committee on Finance.

Mr. Price, from the committee on Schuylkill wharves, made a report with an ordinance, providing for the construction of a new wharf at Walnut street. The ordinance was read three times and passed.

Mr. Lewis, from the Watering Committee, made the following report, the resolutions attached to which were agreed to:—

#### *To the Select and Common Council.*

The Watering committee respectfully submit:—That some years ago, a lot of ground situated at the northeast corner of Schuylkill Second and Callowhill street, was purchased for the purpose of bringing the twenty inch main from the bank of the old Union Canal into Callowhill street.

By a new arrangement of the main, this lot is no longer valuable for City purposes, and the committee are of opinion that it may now be advantageously sold.—The Fairmount Bridge Company are now erecting a new house for the accommodation of their toll-gatherer, and we have understood they propose to sell the house and lot now occupied for that purpose on the north side of the bridge. The committee believing that the possession of the property is of great importance to the city, as it not only joins the garden plot of the water works, but commands almost entirely the main entrance to that great public work, have made some preliminary inquiries to ascertain on what terms the property could be purchased. They have succeeded in obtaining the

opinion of the Managers of the Bridge Company, and think it may be had for six thousand dollars, which is considerably lower than it was at first offered. A plan of the lot is herewith presented, from which it will be seen that it might be so occupied as not only materially to interfere with the public enjoyment of the premises at Fairmount, but give all the inconvenience which attaches to a lot of limited dimensions bordering on public property. The committee are of opinion, that the advantages are so obvious as to make it unnecessary to state them in detail, and accordingly report resolutions authorizing them to sell the vacant lot on Callowhill and Second street, and purchase the property of the Bridge Company.

Resolved, That the Watering committee be and are hereby authorized to purchase from the Fairmount Bridge Company, the lot of ground now occupied by the toll-gatherer's house, and adjoining other lot of the city at Fairmount, for a sum not exceeding six thousand dollars; and that when the purchase is completed, the Mayor shall draw his warrant on the City Treasurer for the amount required, and have the same charged to the appropriation No. 14, City property.

Resolved, That the watering committee be and they are hereby authorized to sell the lot at the northeast corner of Schuylkill Second and Callowhill streets, belonging to the corporation, at public sale, and that the proceeds of sale be paid to the City Treasury, and be placed at the credit of appropriation No. 14, City property.

LAWRENCE LEWIS, Chairman, Pro Tem.

FRED. FRALFY,

THOS. LANCASTER,

JAMES HUTCHINSON,

RICHARD PRICE,

Committee.

Philad. May 13, 1835.

#### COMMON COUNCIL.

Mr. Fraley presented a petition for paving Sassafras street, between Tenth and Eleventh streets. Referred to paving committee.

Mr. Hutchinson presented a petition from 200 citizens, praying that the iron railing round Washington square, may be placed inside of the front row of trees. Referred to the committee on public squares.

The chair read a communication from the Board of Managers of Will's Hospital, informing Council of the resignation of Robert Snowden, from that Board.

Mr. Chandler presented a petition from Jacob Connel, praying release from certain responsibilities in the case of Edward A. Allen. Referred to the committee on Finance.

Mr. Wright presented a petition from residents of Appletree Alley, in relation to nuisances in that neighborhood; also praying for the curbing of the alley.—Referred to committee on cleansing the city.

Mr. Wright presented a petition from citizens in the neighborhood of the New Market House on Schuylkill High street, asking that a clerk be appointed to guard against impositions that might be practised without some check of this kind. Referred to the committee on markets.

Mr. Gilder, from the paving committee, made the following report.

The Paving Committee beg leave to report on part of the petitions referred to them, and would recommend the adoption of the following resolutions:

Resolved, That the City Commissioners under the direction of the Paving committee, be and they are hereby directed to have regulated, curbed and paved, the following streets, viz:

Mulberry street from Schuylkill 4th to Front street,

\$6,036

Ann street from Schuylkill 6th to 7th, between Mulberry and Filbert,

653

Jones street from Schuylkill 7th to 8th, between Filbert and High,	\$ 640
Clay street from Beach to Willow, between Lombard and Pine,	237
Helmuth street from Schuylkill 6th to 7th, between Lombard and Pine,	560
Richard street from Schuylkill 6th to 7th, between Lombard and Pine,	373
Schuylkill 7th, from Walnut to Locust,	915
Schuylkill 7th, from Lombard to Pine,	814
Schuylkill 5th, from Spruce to Walnut,	2370
Schuylkill 4th, from High to Chestnut,	1400
Schuylkill 3d, from Walnut to Spruce,	2368
Locust street, from Schuylkill 7th to 5th streets,	2732

Resolved, That the City Commissioners be and they are hereby directed to cause the following private streets and alleys, to be regulated, curbed and paved, as provided for by an act of Assembly passed April 23d, 1829, to wit:—

Jefferson avenue running from Broad to Schuylkill 8th between Walnut and George streets.

Tin Alley running from Walnut to Locust streets and between Broad and Juniper.

Good Will Alley or Court, situated between Sassafras and Cherry streets, and between Juniper and Broad streets.

Clair Alley, situated between Vine and Sassafras and between Thirteenth and Juniper streets.

The committee also submitted an ordinance providing for the repeal of so much of the ordinance of Feb. 27, 1834, as relates to collecting toll on persons who do not pass through the city. The first resolution was ordered to be printed, and the second was adopted, and concurred in by Select Council. The ordinance was laid on the table.

Mr. Chandler submitted the report of the committee on the subject of the proposed connection between the Rail way in Broad street and Delaware Front, for the further facilitation of trade.

Mr. Earp presented a minority report on the subject, both of which were ordered to be printed for the use of Councils.

Mr. Chandler made a verbal report in relation to the burial ground on Franklin Square, requesting a special meeting to be called for the further consideration of the subject.

Mr. Dunlap made a report on behalf of the special committee, to whom was referred the communication from the Pennsylvania Institution for the Instruction of the Blind.

This report elicited considerable debate, in the course of which Mr. Fray offered a resolution that the special committee be instructed to report an ordinance for the sale of as much land belonging to the Wills' Hospital, as would amount to \$12,000, to be handed over to the Managers of the Institution for the Blind, to be placed in the funds of that Institution.

Dr. Huston opposed the resolution, and moved the adoption of another, to wit: "That it be inexpedient to dispose of any part of the lands belonging to Wills' Hospital."

Mr. Earp proposed that the words "*at the present time*," be inserted as an amendment, but on taking the question on the amendment it was lost, and the resolution of Dr. Huston was adopted.

On motion adjourned.

#### CITY COUNCILS.

A special meeting of the City Councils was held on Monday afternoon. In Select Council, Mr. Eyre was appointed President pro tem. In Common Council, Mr. Gilder was called to the chair.

Councils assembled in joint meeting for the purpose of electing members of the Board of Guardians of the Poor, and the election resulted, by the report of Mr.

Lewis of the Select, and Mr. Wright of the Common Council, acting as tellers, in the choice of

Geo. W. Jones,  
Wm. S. Hansell,  
and

Jos. B. Smith,

(In the place of Jacob B. Lancaster, Esq. resigned.)

Mr. Chandler presented a petition for the re-paving Ninth street, between Arch and Filbert, which was referred to the paving committee with power to act

From the Commercial List.

#### INSPECTION LAWS OF PENNSYLVANIA.

##### Flour.

*Be it enacted by the Senate and House of Representatives of the commonwealth of Pennsylvania in General Assembly, met, and it is hereby enacted by the authority of the same, That all flour of wheat, flour of rye, and meal made of Indian corn, shall, if designed for exportation from either of the places mentioned in this section, be liable to the inspection at the respective place, as follows, to wit:*

I. At the city and county of Philadelphia by the inspector of flour appointed for the said city and county.

II. At the city of Pittsburgh, and in the counties of Allegheny, Westmoreland, Washington, Fayette, Greene, Indiana, Jefferson, Armstrong, Butler, Beaver, Mercer, Crawford, Erie, Warren, Venango, by the inspector of flour appointed for the said city and counties.

Provided, That flour and meal manufactured in any other State, and put up in casks which shall bear the brand or the name of such State, may be exported from this commonwealth as the manufacture of the State from which it shall come, and not as the flour or meal of Pennsylvania, without being liable to inspection as aforesaid.

And provided also, That such flour or meal as shall be manufactured within the counties of Westmoreland, Washington, Green, and Fayette, and transported by land out of this commonwealth, shall not be liable to inspection as aforesaid.

Provided, That nothing herein contained shall be construed to prevent the exportation of sour or damaged flour, as such, if it be so marked distinctly upon the casks containing the same by the inspector or deputy.

Flour of wheat, liable to inspection as aforesaid, shall be packed in barrels or half barrels, well made of good seasoned materials, and tightened with ten hoops sufficiently nailed with four nails in each chine hoop, and three nails in each upper bilge hoop.

The barrels which shall be used for the purpose aforesaid shall be of the diameter of sixteen inches and a half at the head, and shall be marked "Number one." And every such barrel shall be made of staves twenty seven inches in length. Every half barrel which shall be used for the purpose aforesaid shall be of the diameter of twelve inches and a half at the head, and shall be made of staves twenty three inches in length, and shall be denominated "Number Two."

Every barrel "Number One," of wheat flour shall contain the full quantity or weight of one hundred ninety-six pounds of such flour. Every half barrel of wheat flour shall contain the full quantity or weight of ninety eight pounds of such flour.

Every miller or bolter shall brand every barrel and half barrel of flour put up by him with the number one or two according to the dimensions thereof, as aforesaid, before the same shall be removed from the place where the same was bolted, under the penalty of twenty cents for every barrel or half barrel removed without being so branded. He shall also, under the like penalty, brand as aforesaid every barrel and half barrel of flour with the weight of the flour therein contained.

Flour of rye and meal made of Indian corn liable to inspection as aforesaid may be packed in barrels or half barrels made in the manner hereinbefore described.

Flour of rye, and meal made of Indian corn liable to inspection as aforesaid, may also be packed in strong tight puncheons or hogsheads suitable for molasses casks, well made of good seasoned white oak or red oak staves, with pine or other suitable heads tightened and bound with sixteen good and sufficient hoops, two of which at least namely, the second from each chine, shall be of iron. They shall be well secured with at least four nails in each chine hoop and three wooden plugs or pegs at the upper edge of each upper bilge hoop.

Every puncheon or hogshead which shall be used for the purpose aforesaid shall be of the following dimensions, to wit—

The diameter at the head shall be twenty seven inches.

The diameter at the bung or bilge shall be thirty-one inches.

And every such cask shall be made of staves forty-one inches in length.

Every puncheon or hogshead of rye flour, or of corn meal, designed for exportation as aforesaid, shall contain the full quantity or weight of eight hundred pounds nett of such flour or meal.

If any miller or bolter of flour for exportation as aforesaid, shall pack flour or meal in a cask of any size or dimension not hereinbefore specified, he shall forfeit to the purchaser the cask in which such flour or meal shall have been packed, or the value thereof in his account, and the person who shall have sold the same for exportation shall forfeit and pay to the inspector of such flour or meal, twenty cents for every such cask. And if any miller or bolter of flour shall pack any flour or meal in a cask not hooped and nailed as aforesaid, he shall forfeit and pay to the purchaser thereof twenty cents for every such cask.

Every person offering any flour or meal for sale in casks made of unseasoned materials shall pay to the inspector of such flour or meal twenty-five cents for branding the same, for each and every cask, and the owner of such flour shall have an action for damages which may be sustained thereby against the miller or cooper who furnished such casks, and such flour shall not be exported under the penalty of one dollar per barrel.

If any person shall put a false or a wrong tare upon any cask containing flour or meal, to the disadvantage of the purchaser, such person shall forfeit for each cask so falsely tared, the sum of seventy-five cents.

Every miller and bolter of flour for exportation shall cause his brand mark, as aforesaid, to be entered with the clerk of the court of quarter sessions of the county where he resides, together with his name and place of residence, under the penalty of five dollars for every month during which he shall have exercised his said employment without having made such entry.

Every open boat, float or shallop which shall be used to convey flour, corn or meal from the mill as aforesaid, or from any landing place to the place of exportation, or to any other place, shall be provided with a covering or tarpauling sufficient to secure the same in case of rain.

Every person who shall unload or discharge any flour, corn or meal, designed for exportation, at any landing place, or other place, shall cause the same forthwith to be put in a store or under a shelter sufficient to keep it dry.

#### *Beef and Pork.*

Salted beef and pork shall, if designed for ship stores, or for exportation, from the port of Philadelphia, be liable to be inspected by the inspector of salted provisions appointed for the said port.

Provided, That salted beef and pork, as aforesaid, which shall be imported or brought from any other

state or country, and which shall bear the brand of the name of such state or country upon the casks containing the same, may be sold or exported as aforesaid, as the product of the state or country from which it shall come, and not as the beef or pork of Pennsylvania, without being liable to inspection as aforesaid.

It shall not be lawful for the person packing or putting up any pork for ship stores or for exportation as aforesaid, to put or pack in any tierce of pork more than three heads of pork, or in any barrel of pork more than two heads of pork, or of any half barrel of pork more than one head of pork.

It shall also be lawful for any person to put up or pack beef for ship stores or exportation, as aforesaid, under the denomination of "Extra Mess," "Mess Prime," or "Cargo" beef, if the same shall be of the quality, and assorted in manner herein specified, to wit:

I. Extra Mess beef shall consist of the best pieces of oxen or steers, well fattened, and weighing at least six hundred pounds, exclusively of the hide and tallow.

II. Mess beef shall consist of good pieces of large and well fattened cattle, weighing not less than four hundred pounds, without hocks, shanks or any of the neck.

III. Prime beef shall consist of good pieces of well fattened cattle, without hocks, or more than two shanks and one half of a neck to a barrel.

IV. Cargo beef shall consist of a proportion of good pieces of fattened cattle, without hocks, or more than three shanks, and one half of one neck to a barrel.

It shall also be lawful for any person to put up or pack pork for ship stores or exportation under the denomination of "Mess," "Prime," or "Cargo" pork, if the same shall be of the quality and assorted in the manner herein specified, to wit:

I. Mess pork shall consist of the sides or rib pieces of well fattened hogs, exclusively of other pieces.

II. Prime pork shall consist of a proportion of side pieces, neck and tail pieces, and each barrel of such pork may contain twenty-four pounds of head, properly dressed and prepared, but not any greater quantity of head.

The branding of the words "extra mess," or the word "mess," "prime," or "cargo," as aforesaid, by the owner or persons putting up any beef or pork, shall be deemed a warranty by him that the article so denominated is good and merchantable, and assorted according to the requirements of this act.

#### *Salted Fish.*

Shad and herring put up in barrels or half barrels shall, if designed for exportation from the port of Philadelphia, be liable to be inspected by the inspector of salted provisions appointed for the said port.

Provided, That salted shad or herring put up as aforesaid which shall have been imported or brought from any other State or country, and which shall bear the brand of the name of such State or country, may be exported from this State with the same name branded thereon, and not as the shad or herring of Pennsylvania, without being liable to inspection as aforesaid.

#### *Butter and Hog's Lard.*

Butter and hog's lard shall, if designed for exportation, from any port or place upon the river Delaware, be liable to be inspected by the inspector of butter and hog's lard appointed for the city and county of Philadelphia, or his deputy.

The inspector aforesaid shall also use the three following marks and numbers in the inspection of butter aforesaid, namely, "No. 1 Extra," which shall designate butter of the first and best quality, "No. 1," which shall designate butter of the second quality, and "No. 2," which shall designate the third quality of merchantable butter, and no other numbers shall be used by such inspector.

Butter and hog's lard liable to inspection as aforesaid

shall be sufficiently salted for exportation, and shall be put up in kegs, half kegs, or tubs, made of sound and well seasoned white oak staves or timber, or in canisters. Provided, That butter and hog's lard from any other state, put up as aforesaid, which shall bear the brand or the name of such state, may be exported from this state, with the same name branded thereon, and not as the butter and hog's lard of Pennsylvania, without being liable to inspection as aforesaid.

#### *Tobacco.*

All tobacco designed for exportation from the port of Philadelphia, shall be liable to be inspected by the inspector of tobacco appointed for the said port.

Provided, That tobacco imported or brought from any other State or country which shall bear the brand or mark of the name of such State or country upon the cask or package containing the same, may be exported as the product of the State or country from which it came, and not as the product of Pennsylvania, without being liable to inspection as aforesaid.

The inspector of tobacco shall provide and keep sufficient store-houses at any place between Prime and Green streets conveniently situated for shipping tobacco, and also presses, brands, scratches, and all other apparatus necessary for the inspecting of such tobacco as may be liable to inspection as aforesaid.

It shall be the duty of the inspector aforesaid to strip, sample and press all tobacco submitted to his inspection, he shall make in every hoghead inspected, three breaks, and from each break two hands shall be drawn, tied up, and sealed, which shall compose the sample of the same; he shall also give a certificate for each and every hoghead marked and numbered as per sample.

If any person shall export or lade for exportation from the port aforesaid, any tobacco liable to inspection as aforesaid, before the same shall have been inspected and approved according to law, such person shall forfeit and pay for every hoghead so exported or laden, fifty dollars, one half for the use of the inspector, the other half for the use of the commonwealth.

The inspector of tobacco may demand and receive upon each hoghead of tobacco for stripping, sampling, pressing, coopering and branding, one dollar, which fee shall be paid by the planter, merchant or importer, at the time he shall receive the sample.

He may also demand and receive upon each hoghead which shall remain stored for any period greater than a year after the same shall have been inspected by him, at the rate of twenty-five cents for every month he shall have stored the same.

#### *Domestic Distilled Spirits.*

Spirituous liquors distilled within this commonwealth, shall, if designed for exportation, from the port of Philadelphia, except when shipped coastwise by the Distiller, or his agent, shall be liable to inspection, by an inspector of domestic distilled spirits, appointed for the city and county of Philadelphia.

Every inspector of domestic distilled spirits shall also, by virtue of his said office, be a gauger, and shall perform the duty of gauging all casks containing such spirits submitted to his inspection, and shall mark thereon the quantity of spirits therein contained, in the manner hereinafter provided.

The inspector or deputy aforesaid, having ascertained the quantity, strength and quality of any spirituous liquors as aforesaid, and also the ullage shall grave or scrape with a scraping iron on one of the heads of each cask, inspected by them, containing whiskey, the exact proof and degrees thereof, and the quantity of gallons or full contents of such cask, and the deficit or number of gallons out at a time of such inspection, if any; and it shall be the duty of such inspector or deputy, at the request of the person or agent applying, to have whiskey inspected, to make out and subscribe a certificate exhibiting in separate columns, the number of casks and

the kinds, the number of gallons or full contents, the deficit of gallons or cuts, if any, and the proofs and degrees thereof, and deliver the same to the applicant, and the said inspector shall receive for inspecting gauging, marking, replacing the bung, and such certificate, a fee of ten cents per cask only.

If any person shall export or lade for exportation from the port of Philadelphia, any distilled spirituous liquors liable to inspection as aforesaid, before the same shall have been inspected and marked according to law, such person shall forfeit and pay ten dollars for every barrel, and twenty dollars for every double barrel and hog-head or other cask or vessel containing such liquor so exported, or laden, to be recovered by the inspector aforesaid, for the city and county of Philadelphia, for the use of the poor of the said city and county, Provided, That it shall and may be lawful for any distiller of whiskey, or his agent, in tending to ship whiskey, the produce of his own stills, coastwise, to ship the same without inspection, upon with or at the office of one of the principal inspectors, an invoice or list exhibiting the number and kinds of casks intended to be shipped, with an affidavit annexed by himself or agent, that such whiskey was made by him, and is intended for a market in one of the sister states, together with a notice of the name of the vessel on which the same is intended to be shipped, and the place where it is intended to be taken on board, at least three hours before it shall be put on board.

Every inspector who shall gauge and mark erroneously any cask of spirits or cider, liable to his inspection as aforesaid, shall forfeit and pay to the person who may be injured thereby twice the value of the excess or deficiency of the quantity marked of the quantity actually contained in such cask.

It shall be unlawful for any inspector or deputy during the continuance of his or their office to do any private gauging, and every inspector or deputy who shall upon the application of any dealer in spirituous liquors, re-gauge any cask containing whiskey or other spirituous liquors, and allow or make the said cask to contain more gallons or a greater quantity than when gauged for the maker or agent for the maker of whiskey, or who shall in any way be found colluding with the dealer to defraud the distiller, or who shall so engage in any private gauging, shall upon conviction of such offence, forfeit it and pay to the use of the commonwealth the sum of fifty dollars, and be forever disabled to act as an inspector or gauger of liquor.

#### *Black Oak Bark.*

Ground black oak bark shall, if designed for exportation from the port of Philadelphia, be liable to be inspected by the inspector of bark appointed for the said port.

All bark liable to inspection as aforesaid, shall be shaved clean from the ross or outside bark,—shall be ground sufficiently fine for use, and be free from damage by wet, mould or otherwise.

If the inspector shall find in any cask of bark submitted to his inspection as aforesaid, any mixture of different barks, or of tan, or of other extraneous substances, or if the same shall not be shaved clean from ross, and be free from damage by wet, mould or otherwise as aforesaid, he shall condemn the same, and mark distinctly on each head, with a marking iron, the letter (C.)

#### *Flaxseed.*

All flaxseed designed for exportation from the port of Philadelphia, shall be well cleansed and prepared, and put up in casks made of sound oak staves.

Every cask containing flaxseed, and designed for exportation as aforesaid, shall be branded with the initial letter of the christian name, and with the surname at full length of the person who cleansed and prepared the flaxseed therein contained.

#### *Pot and Pearl Ashes.*

Pot and pearl ashes, shall, if designed for exportation



from the port of Philadelphia, be liable to inspection by the inspector of pot and pearl ashes appointed for the said port.

Provided, That pot or pearl ashes which shall have been imported or brought from any other State or country, and which shall bear the brand of the name of such State or country, may be exported from this State with such name branded thereon as the product and manufacture of the State from which it shall come, and not as the product or manufactures of Pennsylvania, without being liable to inspection as aforesaid.

## REPORT ON CITY RAIL ROAD.

### *To the Select and Common Councils of Philadelphia.*

THE Commissioners appointed under a resolution of the Select and Common Councils of Philadelphia, which directs them to "enquire into the best means of conveying merchandize between the wharves and the Broad street Rail-Road—whether by Rail-Roads, Tramways, or otherwise, together with the best materials for either, and what route or routes should be adopted, and where, if any is necessary, a general depot should be established," with "an estimate of the cost of any work or improvement they may recommend" respectfully submit the following report:—

The Commissioners immediately after their appointment, took measures to collect all the information within their reach, upon the important questions referred to in the resolution of Councils. They invited communications from all their fellow citizens who might feel an interest in the subject, and from the several professional Engineers resident in the city or its vicinity. They also ascertained to their own entire satisfaction, the practical results of the location of Rail-Roads through the streets of Baltimore and other cities, how far they had tended to the accommodation of trade, or had in any respect been productive of inconvenience to the public. Upon the mass of information thus brought together, a close examination of the city map, a personal inspection of all the routes which have been suggested, and upon conversations which they have sought with intelligent men of all classes and occupations in the community, those opinions have been formed which they are now about to communicate.

Such is the composition of the Board, and such the novelty, importance, and intrinsic difficulty of the questions submitted, that they were not surprised to find considerable differences of sentiment among themselves, both at the outset, and throughout the progress of their investigations. They are happy, however, to say, that all such differences have yielded to the influence of calm discussion and accurate information, and that the recommendations which they are about to submit to the notice of Councils have been adopted with perfect unanimity. The Commissioners cannot too emphatically express their conviction that some communication of the kind referred to in the resolution of Councils, is indispensably necessary to maintain the present prosperity of the city, and to secure for her the prospective benefits of those vast public improvements to which her money and her enterprise have so liberally contributed. To omit the making of such an improvement, would be to reject a rich harvest already growing upon her threshold, and to build up the prosperity of the adjoining districts, at the expense of every owner of property within her borders. The considerations upon which this opinion is founded are so obvious, and they seem to be so fully appreciated by Councils, and so clearly understood by the citizens at large, that it is unnecessary to present them in detail. The Commissioners, therefore, pass to a decision of the first question referred to them, namely, the best means of conveying merchandize between the Delaware and Schuylkill wharves and the Columbia Rail-Road.

The adoption of Tramways (as they are commonly called in this country) or in other words, of a road composed of long flat stones joined together and lying level with the surface of the ground, has been suggested, to avoid interference with the passage of ordinary vehicles through those streets in which the improvement may be located. Desirable as this object is, there are objections to such a road which the Commissioners regard as insuperable. The cars which now travel on the Columbia Rail-Road, could not pass upon a Tramway through the city without a very important, and in many respects most inconvenient alteration in the form of their wheels. The flanges must be widened so as to form a tire of sufficient width to pass with ease over the flat surface of the Tramway. As there is no reason to hope for such a change in the general transportation of the Rail-Roads leading to Philadelphia, it follows that if Tramways be adopted, all goods arriving in Broad street must be removed from one car to another, before they can pass through the city, and thus the advantage of the proposed communication be in a great measure neutralized. For this reason, and because the Commissioners are of opinion, that upon the plan, and by the route which they are about to recommend, no very serious obstructions to the ordinary travel will be created, they are unanimously of opinion, that a Rail-Road is the only form of improvement by which the great objects in contemplation of Councils can possibly be accomplished.

In answer to the all important question what route or routes should be adopted for the proposed improvement, the Commissioners offer their unanimous suffrage in favour of a line commencing on the Delaware at the Drawbridge, and passing up Dock street to Third, up Third to High, up High to the Broad street Rail-Road, and thence along High to Ashton street, on the Schuylkill Front, to be connected hereafter with other lines along Delaware Avenue and along the Schuylkill. To some of the considerations which have induced them to form this opinion they will briefly refer.

1. The route just indicated affords greater natural facilities for the location of a Rail-Road, conveniently graded, than any other. By the report of the City Surveyor, it appears that the ascents and descents of the east and west streets, do not exceed fourteen inches in each hundred feet, except in Walnut and Chesnut streets, and in the immediate rise from both rivers at all these streets—that near the Delaware, Dock and Spruce afford the easiest graduation for a Rail-Road, and near the Schuylkill, High street from Ashton to Broad is most uniform in its ascending grade. It appears, also, that the rise from the Delaware upon all the streets (Dock and Spruce excepted) is too precipitous for the passage of burthen cars, without the use of fixed machinery, or the uncertain and dangerous expedient of brakes or clogs. The descent of High street, from its summit at Broad to the intersection of Delaware Fourth street is, with one trifling exception, less than twelve inches in the hundred feet; from Fourth to Third there is a rise of seventeen inches in the hundred feet; along Third to Dock the descent is about fourteen inches in one hundred feet, and along Dock from Third to the Drawbridge landing the descent is only eleven feet in about two thousand feet. A careful comparison of these grades with those of any other line which can be indicated from east to west, will fully justify the preference which the Commissioners have expressed on the score of natural facility.

2. The route recommended by the Commissioners will afford greater accommodations to the trade passing along it, than any other which can be devised. The great width of Market and Dock streets admits of the laying of four tracts without inconvenience or crowding, and of all necessary arrangements for turn-outs at each place along the line where it may be de-

sirable to deposit property. It is doubtful whether on any other of the East and West streets such lateral facilities could be afforded, and whether the benefit of the improvement would not be in a great measure confined to the Delaware end of the line. This capacity to diffuse its benefits over a considerable extent of the City, has been deemed by the Commissioners a most important advantage—nor could they close their eyes to the fact, that the vacant space at the Drawbridge affords the only ground within the limits of the City, where a Rail-Road track passing from West to East, can be conveniently and properly curved into the contemplated Avenue along the Delaware front. This Avenue when completed will have a spacious entrance with an easy graduation into Dock street, and thus the revolving platforms which would be necessary in any other situation may be dispensed with.

3. A Rail-Road upon the route recommended will interfere less than any other with the convenience of private dwellings, and with private travel. Throughout its whole length, there are very few buildings which are not occupied wholly or in part for purposes of trade, and which would not be directly accommodated in the way of such trade. In this respect none of the East and West streets are similarly situated with Market street. As to the travel on Market street, it is chiefly of that sort which the Rail-Road would better accommodate, or which under the arrangements resulting from its construction, would naturally take a different direction.

4. Another consideration which has had great weight with the Commissioners is, that the route by Market, Third and Dock streets, will abundantly accommodate that portion of the City, which heretofore has been connected with the Western business, and in which property has become valuable in consequence of that connection. They deem it impolitic suddenly to change the great channels of business, so as to enhance the value of property in one part of a City, at the expense of another, and unjust to do so without great necessity. In the present instance they believe there is no plausible pretext for such a change.

It is impracticable for the Commissioners within the proper limits of a report, to do more than sketch the views by which they have been governed in the selection of a route. They are of a kind however to require little explanation, as they will readily occur to any practical mind when once directed to the subject.

Among the plans which have been suggested for the construction of the Rail-Road, the Committee prefer that recommended in the able communication from W. Strickland, Esq., Civil Engineer, a copy of which accompanies this report. He proposes to curve the Broad street Rail-Road into High street with four separate tracks, two tracks six feet apart on the centre or crown of the street, and one track within five feet of the present curb-stone on each side of the way—that the foot pavements be increased five feet in width, and that in every square there be a turn-out from the tracks in the centre, to those near the curbstones on each side—or, in other words, branch tracks from the right and left on each side of the central railways; that wrought iron edge rails of the common construction be used, fixed by chains upon stone blocks three feet apart, the top of the rail being flush with the surface of the pebble pavement, and protected longitudinally on each side by granite flag-stones of one foot in width: These stones are to be laid close to the rails, on the outside of the tracks, and from two to three inches from the rails on the inside so as to allow sufficient play for the dip of the flange of the car wheels.

The cost of the improvement above described, including its continuation out High street from Broad to Ashton, is estimated by the engineer at \$270,000, which estimate also includes a continuation of the tracks down High street from Third to a point on the West side of Front, where he proposes to fix pivots for the

return of cars towards Broad street, so as to give the merchants on Market below Third street a direct communication with the Rail Road on Broad street.

The Commissioners are aware that two prominent objections may be started, to the plan and route, which they have felt it their duty to recommend—namely, that the removal of the Market houses from High street to other localities will be inconvenient, and that it will cause much expense over and above the actual cost of the rail road. They believe, however, that the more these objections are examined, the less important they will appear, and that they are insignificant in comparison with the broad and general interests to be advanced by the contemplated improvement. To recommend other sites for the erection of Market houses, forms no part of the duty prescribed to the Commissioners. They have nevertheless made such enquiries as to satisfy themselves, that suitable positions can be obtained and several markets erected at no exorbitant expense, which would accommodate the public quite as well if not better than the present. They deem it important, moreover, to relieve the wholesale business of High street from the obstructions created by the markets, and by the removal of those buildings to restore the original plan of the city. A considerable portion of the expense may no doubt be defrayed by voluntary contributions from those who own property on the line of the Rail Road, and who will be benefited at once by a new accommodation to trade, and by the removal of a long standing inconvenience.

If the Commissioners are right in their estimate of the importance of the proposed communication to the prosperity of the city, it follows as a corollary, that no time should be lost in carrying it into complete effect. Every day's delay will deprive Philadelphia of some portion of the advantages to which she is fairly entitled, and increase the difficulty of recalling business to those channels from which, by the superior foresight or activity of other districts, it may have been diverted. They would therefore respectfully recommend to the Councils of the City, if the plan herein submitted shall meet their approbation, forthwith to commence the construction of the Rail Road along the Market street from Broad to Eighth street, and from Broad to Ashton and along Third and Dock streets, and also to take immediate measures for procuring other sites on which to erect suitable market buildings. In accomplishing the latter object, they confidently believe that no great difficulty will be experienced, and that the markets may be removed from High street between Eighth and Third streets, by the time the other portions of the line shall have been completed. If however any unexpected obstacles should occur, so as materially to delay the completion of an entire line from Broad street to the Delaware, they regard prompt action as of so much importance as to justify the construction of a cheap temporary line to be used until the better and more permanent one can be finished. For this purpose a route leaving High street at Eighth street, passing down Eighth to Walnut, down Walnut to Dock, and down Dock to the river, appears most convenient, although as a permanent location it is liable to serious objections, and is in no respect comparable to that which the Commissioners have recommended.

To obviate any objections to the location of Rail Roads through the City on the ground of general inconvenience, the Commissioners respectfully submit the following extract of a communication received from Baltimore, and from a source entitled to the highest credit:

"Railways can be constructed along the streets of a City on which produce and merchandize may be conveyed, with more economy and less interruption to the ordinary intercourse thereof than by any other mode whatever. They can be so laid down as to be crossed every where freely, and turn-outs are not required except where the streets are very narrow indeed. The opposition to the extension of rail ways in this City has

proceeded from a few individuals who were large property holders in the Western section of the city, and who were desirous of monopolising the whole trade of the Rail Road. Their representations have been shown to be groundless, and our Councils have almost unanimously affirmed the general convenience and advantages of their introduction."

As a summary of their views upon the interesting questions presented for their consideration, the Commissioners submit a copy of certain resolutions which they unanimously adopted, and which proved the basis of this report:

1. Resolved, That in the opinion of this Board the best plan for connecting the Columbia Rail Road with the wharves on the Delaware and Schuylkill, is by a rail way beginning at Broad street and extending to both rivers, to be connected with other rail ways along Delaware Avenue and the Schuylkill front, from Cedar to Vine streets.

2. Resolved, That High street, on account of its central position, superior width, and established character as the principal seat of business with the West, presents the only eligible scite for the line of connexion between Broad street and the Delaware wharves, and that such line should pass down High to Third, down Third to Dock, and down Dock to the Drawbridge landing.

3. Resolved, That it be recommended to Councils forthwith to commence the construction of a rail road in High street from Eighth to Broad and from Broad to Ashton, and also in Third and Dock streets, and further to take immediate measures for the removal of the markets from High street, and the establishment of suitable accommodations elsewhere.

4. Resolved, That it is not expedient for Councils to erect a public depository for merchandize on the Delaware, it being deemed better that stores for the reception of country produce and other articles of commerce on the rail way, be erected by individual enterprise, as the same may be required.

All which is respectfully submitted.

By order of the Board,

THOS. P. COPE, Chairman.

Attest, J. M. WRIGHT, Secretary.

Philadelphia, May 13th, 1835.

(Engineer's Report and views of minority next week.)

### LAKE ONTARIO.

Navigation on Lake Ontario has been open for several weeks. On Sunday last the schooner William Buckley, from Sackets Harbor, arrived at this port through the Welland Canal with over sixty passengers, emigrants. About thirty of the number stopped here—the remainder went to Cleveland. The W. B. was the first vessel that came through the canal this season. Several others, however, were in the canal at the same time, and one laden with merchandize from New York, came through immediately astern of the W. B., for which the Captain received a premium of \$100, it being the first vessel laden with New York goods that has come into Lake Erie.—*Erie Observer*, May 9.

From the Commercial Herald.

### BANK DIVIDENDS.

Believing that the following statement would prove satisfactory to our subscribers, we have presented in a tabular form, the annual dividends declared by the different Banking Institutions in Philadelphia; from January 1830, to May 1835, embracing a period of nearly five and a half years. The dividends declared by the Banks incorporated since 1830, are also given. All the Banks in Philadelphia are included in this statement, except the Southwark Bank, the Cashier of which, refused to furnish a statement of its demands; although a

matter of general interest and of public record, and the Moyamensing Bank from the Cashier of which no statement has been obtained. This table presents, at a single view, the annual dividends—the aggregate amount, and the yearly average of each Bank; from which it will be seen that the highest average is over 18, while the lowest is less than 6 per cent. per annum.

Statement of the Dividends declared by the different Banks in PHILADELPHIA, from January 1830, to May 1835, inclusive.

Prepared for the Commercial Herald and Commercial List.  
BANK DIVIDENDS.

	1830.	1831.	1832.	1833.	1834.	1835.	Total.	Yearly average.
Bank of the United States,	7	7	7	7	7	34	384	\$7.00
Bank of North America,	5	5	5	5	6	34	294	5.36
Bank of Pennsylvania,	6	6	6	9	7	35	39	7.00
Farmers' and Mechanics' Bank,	74	8	8	8	8	4	434	7.91
Philadelphia Bank,	5	54	6	6	5	3	284	5.18
Schuylkill Bank,	8	8	15	8	7	34	424	7.73
Bank of the Northern Liberties,	20	15	7	16	12	26	104	18.90
Commercial Bank of Pennsylvania,	6	7	9	8	9	44	504	7.76
Mechanics' Bank,	7	84	10	10	10	5	49	8.90
Keightum Bank,	10	8	20	10	94	5	65	11.81
Bank of Penn Township,	74	8	10	10	94	5	50	9.09
Manufacturers' and Mechanics',				74	6	4	174	7.00
Instituted in 1832,				74	7	4	18	7.20
Western Bank,				64	7	4	14	5.60
do.						34		
do.								

### WILKESBARRE—THE PACKET BOATS.

We have heretofore neglected to notice the daily line of packet boats between Wilkesbarre and Northumberland. These splendid and convenient boats, the "Geo. Dennison," and "Gertrude," are owned principally by our enterprising citizens, Messrs. Horton and Dean, and arrive and depart from this place daily. For comfort and expedition, they surpass every other mode of travelling.

The opening of the canal this season has created an activity in business at this place, hitherto unknown since its completion. Many have engaged extensively in the coal business, and the Baltimore Coal Company have re-commenced their works with vigor. This Company are now constructing a Rail-road from their extensive beds, to the canal, which improvement will serve materially to extend and enlarge their operations. Our town is soon destined to become a place of active and permanent business, and our entire Valley is opening a prospect where capitalists can invest their funds with great profit and advantage. Our steam boat—our canal—our contemplated Rail-road to the Lehigh—will all shower their favors upon us, and reward industry and enterprise with competence and wealth,  
JF. Democrat.

From the Village Record.

# FLORAL CALENDAR.

WEST BRADFORD BOARDING SCHOOL, }  
May 2, 1835. }

The following is a catalogue of plants which were found, in bloom during an excursion on May-day, between this place and the forks of Brandywine:

*Botanic names. Common names.*

Draba Verna—Shad Blossom.  
Claytonia Virginica—Spring Beauty.  
Glechoma Hederacea—Ground Ivy.  
Leontodon Taraxacum—Dandelion.  
Viola Scaberrimula.  
Erythronium Americanum—Adder's Tongue.  
Stellaria Media—Common Chickweed.  
Anemone Nemorosa—Wind-flower.  
Panax Trifolium—Dwarf Ginseng.  
Houstonia Cœrulea—Innocence.  
Luzula Campestris—Field Rush.  
Ranunculus Abortivus.  
Fagus Sylvatica—White Beech.  
Carpinus Americana—Water Beech.  
Ostrya Virginica—Iron Wood.  
Saxifraga Virginica—Early Saxifrage.  
Sanguinaria Canadensis—Blood Root.  
Viola Debilis.  
Dentaria Laciniata—Tooth Wort.  
Hepatica Triloba—Liverwort.  
Syrphocarpus Foetida—Skunk Cabbage.  
Gnaphalium Plantaginicum—Early Life ever-lasting.  
Ranunculus Pennsylvanica.  
Camophyllum Thalictroides—Blue Cohosh.  
Viola Cucullata—Common blue Violet.  
Anemone Thalictroides—Rue Anemone.  
Asarum Canadense—Wild Ginger.  
Mitella Diphylla—Bishop's Cap.  
Potentilla Canadensis—Cinque foil.  
Cerastium Oblongifolium.  
Cardamine Pennsylvanica—Water Cress.  
Polemonium Reptans—Jacob's Ladder.  
Veronica Agrestis.  
Fragaria Virginiana—Wild Straw Berry.  
Aronia Botryapium—Service Berry.  
Orontium Aquaticum—Golden Club.

The *Corallorhiza Hyemalis* grows in great abundance in a woodland south east of this place. The *Camophyllum Thalictroides* grows in two or three localities near here, and also the *Staphylea Trifolia*.

C. H.

## THE STEAM BOAT.

The new steam boat "Susquehanna" arrived at this place from Owego, on Thursday last, amidst the general acclamations of our citizens. She was built at Owego, N. Y. on a new plan, admirably adapted to the navigation of the Susquehanna river, and thus far has fully realized the expectations of her projectors.—She made her first trip to this place, a distance of about 130 miles, in ten hours, without the aid of her two side wheels, and with the disadvantage of new machinery. Capt. Toby, who built the boat, commanded her in her first voyage, and several citizens of Owego, and of the intermediate villages accompanied. On Friday she returned, and marched up the rapid current with a strength and velocity that afford a reasonable belief of her entire success.

She is designed, as we are informed, both for passengers and for towing, and should she answer present expectation, will be of great advantage to the business of this Valley.—*Wilkesbarre Democrat*, May 13.

## INDIAN RELICKS.

A brass Medal has been left at this office, which together with several other articles and a human skull,

was dug up a few days since, in Wrightsville, York county, Pa.—It bears on one side a head with the inscription, "George, King of Great Britain," and on the other, an Indian with his bow and arrow, in the act of shooting a deer. It appears to have been worn as an ornament for the nose or ears. There were found also two others of similar description—a brass kettle—a string of white beads, one and a half yards in length—some red paint and twenty-five rings, one of which was dated 1716.—*Columbia Spy*.

**SCHUYLKILL CANAL.**—From twelve o'clock on Sunday till five o'clock, P. M. on Monday, one hundred and twenty-six boats, including Coal, with various articles of Produce, arrived at Fairmount Locks, exclusive of those freighted with Lime, Limestone, and Stone. This is by far the largest number of arrivals that has ever taken place in the same period of time, and clearly proves the astonishingly rapid growth of our trade with the West. The trade of a great portion of that immense region *must and will* unquestionably come to Philadelphia. Among the various articles composing the cargoes of this Fleet of Boats were, Floor 3304 bbls.—10,391 Bushels Wheat and Rye, 1728 do Corn; Oats 1000; 166,663 lbs. Bacon; Tobacco 21,640 lbs; Whiskey 126 bbls; Leather 54,847 lbs; Castings 204,820 lbs; 95,803 lbs. Pig Metal and Blooms, and 3768 tons of Coal.—*Herald*.

**Interesting Fact.**—The following from a correspondent at Harrisburg, is the commencement of our trade going to Pennsylvania:

"A boat arrived here yesterday from Utica, in the state of New York, via the canal to Newtown, and from thence down the Susquehanna to the Pennsylvania Canal at the Big Island, and so on to Columbia—with a full load of produce.—*N. Y. Star*."

**COLUMBIA RAIL ROAD.**—During the month of November, 688 cars passed from Philadelphia; December 761; January 749; February 842; March 1142; April 1315—averaging upwards of 43 per day during the last month.—*Com. List*.

From the Kingston Republican and Herald. May 13.

## ISRAEL HARDING.

DIED, in Eaton, on the 7th inst. Mr. Israel Harding, in the 80th year of his age, a Soldier of the Revolution. Mr. Harding was a native of Colchester in the State of Connecticut, and in early life emigrated to the valley of Wyoming. At the breaking out of the war he was one among the many young men of Wyoming, who animated by the love of freedom, enlisted in the service of his country, and joined the main army, under the great Washington, and during a period of seven years continued to combat the foes of liberty, participating in the battles of Trenton, Redbank, Monmouth, and many others not recollected by the writer. On the disbanding of the army, Mr. Harding returned to enjoy the society of his numerous relatives and friends, who had survived the bloody massacre of the savages at Wyoming, two of his brothers having fallen under their tomahawk during his absence in the army, and has continued to reside in the county since, and enjoyed the reputation of an honest upright and quiet citizen.

Printed every Saturday morning by WILLIAM F. GEDDES, No. 9 Library street.

The publication office of the Register has been removed from Franklin Place, to No. 61, in the Arcade, West Avenue, up stairs.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.--NO. 22.

PHILADELPHIA, MAY 30, 1835.

No. 386.

## TITLES OF ACTS OF A PUBLIC NATURE.

SESSION—1834-5.

4. An act relative to the election of Managers of the Loyalhanna Bridge Company.

6. A supplement to an act entitled An act for incorporating the Methodist Episcopal church, known by the name of Saint George's Church, in the city of Philadelphia, in the Commonwealth of Pennsylvania, passed the eighth day of December, one thousand seven hundred and eighty nine.

8. An act to vest certain real estate in the Seventh-day Baptist Monastical society of Snowhill.

9. An act to authorize a temporary loan for the use of the Commonwealth.

10. A supplement to an act extending the time for closing the concerns of the Bank of Washington, passed the eighteenth day of December, Anno Domini, one thousand eight hundred and twenty-nine.

11. A supplement to an act entitled An act to provide for the erection of a house for the employment and support of the poor in the county of Fayette.

12. A supplement to an act entitled An act to incorporate the Chambersburg Insurance Company, passed the third day of April, one thousand eight hundred and thirty-three.

14. An act to alter the time of holding the Courts in Susquehanna county.

16. An act to repeal so much of the act passed on the eighth day of April, one thousand eight hundred and thirty-three, for incorporating certain bridge and turnpike companies, and for other purposes, as relates to the roads of St. Clair township, in Allegheny county.

18. An act providing for the maintenance of motive power on the rail roads of this Commonwealth.

19. An act to authorize the commissioners of Tioga county to borrow money for the use of said county.

20. An act to alter the time of holding township elections in Buckingham township, Wayne county, and for the election of a constable in the borough of Brookville, in Jefferson county.

21. An act to increase the compensation of the judge of the District Court of the city and county of Lancaster.

22. A supplement to the act incorporating the South-west Fire Insurance company of the county of Philadelphia.

23. An act to authorize the Philadelphia and Trenton rail road company, to construct a viaduct across the river Delaware.

24. A supplement to the act entitled, an act to provide for the education of children at the public expense, in the city and county of Philadelphia.

25. An act to incorporate the West Philadelphia rail road company.

26. An act authorising the trustees of the Second Presbyterian church, in the city of Philadelphia, and the trustees of the Methodist Episcopal church of the Wyoming circuit, and Wilkesbarre station to sell and convey certain real estate, and for other purposes.

29. An act for the vacation of a part of Cherry alley, in the borough of Washington, in the county of Washington.

30. A supplement to the act entitled an act direct-

ing the collection of a debt due to the Commonwealth, passed the ninth April, one thousand eight hundred and thirty-three.

31. A further supplement to an act for acknowledging and recording deeds.

33. An act to alter the time of holding the courts in Washington county.

34. An act providing for the use of horses on parts of the Allegheny Portage rail road, and Philadelphia and Columbia rail road.

35. An act providing for the payment of the expenses incurred by the contracts made for the purchase of locomotive engines, and for other purposes.

36. A supplement to the act providing for the laying the rails on the Columbia bridge.

37. A supplement to the act relating to county rates and levies, and township rates and levies, and to the act relating to counties and townships, and county and township officers.

38. An act to authorize the Governor to incorporate a company to make a turnpike road from the borough of Ligonier town, in Westmoreland county, to Donegall town in said county.

39. A further supplement to an act to regulate fisheries in the river Su-quehanna and its branches, passed the thirtieth day of March, one thousand eight hundred and thirty-two.

40. A supplement to an act relative to the Butler and Freeport turnpike road company.

41. An act to supply the borough of Harrisburg with water, and for other purposes.

42. An act relative to the election of constables in Carroll and Nottingham townships, in Washington county, and election districts in Sewickly township, in Westmoreland county, and Carroll township, in Perry county.

43. An act to authorise the Canal Commissioners to fill up the Deep Cut at the Grant's Hill Tunnel.

44. A supplement to the act incorporating the Portsmouth and Lancaster Rail Road Company.

45. An act authorising the election and appointment of an additional constable in the township of North Sewickly, in the county of Beaver, and for other purposes.

46. A supplement to the act entitled "An act vacating certain streets, lanes and alleys in Williamsport and in Williamsburg."

47. An act to authorize the Governor to incorporate a company to erect a toll bridge over the West Branch of the river Susquehanna, at Walton's landing.

48. A supplement to act entitled "An act to incorporate the Moyamensing Bank in the county of Philadelphia," passed the thirtieth day of March, one thousand eight hundred and thirty-two.

49. An act to authorize the Supreme Court to take cognizance of certain proceedings in the Court of Common Pleas of Fayette county.

52. A supplement to an act entitled An act to alter an act entitled An act for erecting the town of Carlisle, in the county of Cumberland, into a borough, &c.

55. An act providing for the repair of the bridges erected over the canals and rail roads of this Commonwealth.

56. A supplement to the act entitled An act to incorporate the Locomotive Coal company.
57. A supplement to an act entitled An act authorising the Governor to incorporate the Lackawanna and Susquehanna rail road company.
58. An act for erecting Trinity Church and All Saints Church, in the county of Philadelphia, and St. Thomas's Church, in the county of Montgomery, into three separate corporations.
59. A supplement to an act entitled an act authorising the Governor to incorporate the Philadelphia and Trenton Rail road company.
60. An act authorising the removal of a certain action of ejectment brought by Jacob Hoffman against John G. Coster and others, in the court of Schuylkill county to an adjacent county for trial.
61. An act to incorporate the Philadelphia Association for the relief of disabled Firemen.
62. An act to alter the charters of the boroughs of Liverpool, Gettysburg, and Hanover, and to repeal the law incorporating the borough of Dundaff.
63. An act to establish the District Court for the city and county of Philadelphia.
66. An act to authorise the canal commissioners to settle and adjust the claim of damages of Samuel Talmadge, Robert Criswell, Hugh Bingham, and the heirs of Daniel Cary.
67. A supplement to an act for the preservation and repair of the Cumberland road.
68. An act relative to Banks.
69. An act relative to bonds of county treasurers in the auditor general's office.
70. A supplement to the act incorporating the Schuylkill valley navigation and rail road company, and the several supplements thereto, and to extend the time of commencing and completing the Tuscarora and Cold run tunnel and rail road.
71. An act to recharter the Farmers' bank of Lancaster.
72. An act to recharter the bank of Chester county.
73. An act to recharter the Easton bank.
74. An act to recharter the bank of Germantown.
75. An act to authorise the appraisers of damages on the Pennsylvania canal, to settle and adjust the claims for damages of Daniel Brenneman, William Cochran and Lewis Brenneman.
76. A further supplement to the act, entitled an act to incorporate the York and Maryland line rail road company.
77. An act to authorise the appraisers of damages on the Pennsylvania canal, to settle and adjust the claim of damages of James Rodgers and John M'Keown.
78. A supplement to the act entitled an act relating to counties and townships, and county and township officers, passed on the 15th day of April, 1834.
79. An act to change a part of the line between the counties of Franklin and Cumberland, and to establish the division line between the counties of Huntingdon and Mifflin.
80. An act to authorise the trustees of the Methodist Episcopal Church in Carlisle, Cumberland county, to sell and convey certain real estate.
81. An act to incorporate the Lumberville Delaware bridge company.
82. A supplement to the act entitled an act authorising the Governor to incorporate the Bald Eagle and Spring Creek navigation company, passed the 14th day of April, 1834.
84. An act authorising the election of assessor and assistant assessors in the borough of Tamaqua, in the county of Schuylkill, and to erect said borough into a separate election district.
85. An act to authorise the increase of the annual income of the Roman Catholic Society of St. Joseph, for educating and maintaining poor orphan children gratis.
87. A supplement to an act entitled an act for the better regulation of the city of Philadelphia and districts adjoining, and preserving the navigation of the river Schuylkill, passed 25th March, 1835.
88. An act to incorporate the Neversink Fire Engine company.
89. An act to incorporate the Resolution company in York.
90. A supplement to an act entitled an act to incorporate the subscribers to the articles of association, for the purpose of establishing and conducting an institution for the confinement and reformation of youthful delinquents, under the title of the House of Refuge, passed March 23d, 1835.
92. An act to authorise the Governor to incorporate a company to erect a bridge over Stony Creek, at Johnstown, in Cambria county.
93. An act to incorporate the Farmers' and Drovers' Bank of Waynesburg.
94. An act to incorporate the bank of Lewistown.
95. An act to graduate the lands on which money is due and unpaid to the commonwealth of Pennsylvania.
96. A supplement to the act entitled an act perpetuating and enlarging the corporate powers of the borough of Uniontown, in the county of Fayette.
97. An act to authorise the Governor to incorporate a company for making a turnpike road, at or near the road to Edward Harford's mill, through Newfoundland, to the Belmont and Easton turnpike, near to the line of Wayne and Pike counties.
98. An act for the relief of Benjamin Spayd and Isaac Beck, late overseers of the poor of the borough of Pottsville, and for other purposes.
99. An act to alter the time of holding the courts in Beaver and Montgomery counties.
102. An act authorising the election of assessors and assistant assessors, in the borough of Indiana, in the county of Indiana.
103. An act authorising the laying out of a state road, from the Bethlehem and Sumnerytown road in Lehigh county, to the Bethlehem and Philadelphia road, in Bucks county.
104. A supplement to an act entitled, an act to incorporate the American insurance company of Philadelphia.
106. An act authorising the laying out a state road from Smithport, in M'Kean county, to the Allegheny river where the turnpike road leading from Warren to Ridgeway crosses the same.
107. An act to incorporate the Attleborough Fire Company of Bucks county.
108. An act authorising the Governor to incorporate the Hollidaysburg and Bedford turnpike road company. To incorporate a company to make a turnpike road from the borough of Blairsville, in Indiana county, to Mount Pleasant, in Westmoreland county. To incorporate a company for making a turnpike road in Pike county, to the Bethany and Dingman's choice turnpike road, at or near Kimber's Mills, in Wayne county, and to incorporate the Germantown and Wissahickon turnpike road company.
109. A further supplement to the several acts relative to partitions.
110. An act to erect Adams and York counties into a separate judicial district, to be called the nineteenth district, and for other purposes.
111. An act to authorise the opening of an alley in the city of Pittsburgh from St. Clair, to Irvin street.
112. A supplement to the act entitled an act to incorporate sundry boroughs, and for other purposes, passed 8th April, A. D. 1833.
113. An act authorizing the laying out of a state road from Henry Pearson's Mill, in Mercer county, to the New Castle and Zelinople road, in Beaver county.
114. An act altering the time of holding the annual

election by the Stockholders of the Belmont and Easton turnpike road company, the Honesdale and Clarks-ville turnpike road company, and the Coshocton and Great Bend turnpike road company.

115. A further supplement to an act entitled an act authorizing the Governor to incorporate the Mill Creek and Mine Hill Navigation Company, passed 7th day of April, A. D. 1822, and to authorize the Danville and Pottsville rail road company to extend their road.

117. Act act granting to Julius Crozier and others, corporate powers to enable them to build a bridge over the Chemung river, in Athens township, Bradford county.

118. An act to incorporate the Delaware county Insurance Company.

120. An act authorizing a subscription of stock to the Waynesburg, Green Castle, and Mercersburg turnpike road company.

121. A supplement to the act entitled an act relative to the organization of the courts of justice, passed the 14th day of April, 1834.

122. An act to authorize the Directors of the poor for the county of Lancaster, to sell certain real estate, and for other purposes.

123. An act granting compensation to George Trippner for a tract of donation land.

124. An act to incorporate the Lenox and Harmony turnpike road company, and relative to the Pittsburgh and Beaver turnpike road company.

125. An act extending the mechanic's lien law to the county of Warren and Juniata, and for other purposes.

126. An act to incorporate the Delaware county Branch Rail Road Company.

127. An act relative to the Shippenville and Emlenton, the Shippenville and Foxburg, the Clifford and Wilkesbarre, and the Somerset and Conemaugh turnpike road, and to the Conemaugh bridge at Saltsburg.

128. An act to recharter the Harrisburg Bank.

129. A supplement to an act entitled an act to authorize the trustees of Athens township, in Bradford county, to convey certain lands, passed 27th March, 1827.

130. An act declaring the Warpasumung creek, in the county of Bradford, a public highway from the New York state line up to Joseph Elbree's mill, and for other purposes.

131. An act to extend the laws relating to mechanic's liens to the counties of Washington, Huntingdon, Mercer, Beaver and Allegheny.

132. An act to open the streets, roads, lanes and alleys in a certain portion of the township of Moyamensing, and for fixing the lines and descent of the water courses of all the streets, roads, lanes and alleys in said township.

133. An act to incorporate the Doylestown Insurance company, of Bucks county.

134. A supplement to the act entitled an act to incorporate the Manufacturer's and Mechanic's Bank of the Northern Liberties, in the county of Philadelphia.

136. An act to authorize the Governor to incorporate the Norristown and Valley rail road company.

137. An act to amend an act entitled an act to incorporate the Pennsylvania and Ohio canal company.

138. An act for providing the further improvement of the State by rail roads and canals.

139. A further supplement to the act entitled an act to incorporate the township of Moyamensing, in Philadelphia county.

140. An act to incorporate the Attleborough school association, in the county of Bucks, and for other purposes.

141. A supplement to the act entitled an act to incorporate the Pennsylvania Coke and Iron company.

142. An act making an appropriation to the Eastern and Western Penitentiaries.

143. A supplement to the act entitled an act to provide for the erection of a new prison and debtors apartment, within the city and county, and for the sale of the county prison, in Walnut street, in said city.

144. An act for the establishment of Laurel Hill college, in Penn township, in the county of Philadelphia.

145. An act relative to the laying out of certain state roads, and for other purposes.

146. A supplement to an act entitled an act authorizing the Governor to incorporate a company to make an artificial road, commencing where the Schuylkill canal road intersected the Ridge turnpike road, near Robinson's mill, thence along the bed of said road to the Flat Rock bridge, and for other purposes.

147. An act to incorporate the trustees of the Abbeville institute, near Lancaster, and for other purposes.

148. A supplement to the act entitled, an act authorizing the Governor to incorporate the Tioga navigation company.

149. A supplement to an act entitled, an act relative to the organization of the courts of justice, passed the 14th day of April, one thousand eight hundred and thirty-four.

150. An act authorizing the Clerk of the Orphans' Court of the county of Northampton, to supply the records of said court, and for other purposes.

151. An act relating to inspectors.

152. An act authorizing the commissioners of the internal improvement fund, to apply certain monies to the payment of interest.

153. An act to provide for the call of a convention with limited powers.

154. A supplement to the act, passed 29th March, 1833, entitled an act relative to Orphans' Courts.

155. An act to incorporate the Berks county savings institution.

156. An act to authorize the sale and conveyance of certain real estate, and for other purposes.

157. An act supplementary to an act, entitled an act to prevent the disturbance of meetings held for the purpose of religious worship, passed April 2d, 1822.

158. A supplement to the act entitled, an act to incorporate the trustees of the township and borough of Wilkesbarre, the trustees of the township of Plymouth, and trustees of the township of Hanover, in the county of Luzerne, passed April 2d, 1831, and for other purposes.

159. An act to incorporate the Hanover savings fund society.

160. An act authorizing a temporary loan for the use of the commonwealth.

161. An act authorizing the connection of the Danville and Pottsville rail road with the Susquehanna river at Snodury.

162. An act to incorporate the Spring Garden Fire Insurance company of the county of Philadelphia.

163. An act relative to La Fayette College, and to public education in the city of Lancaster.

164. An act to alter the location of part of Washington street, in the township of Moyamensing, and a supplement to the act entitled an act to incorporate the borough of Bethany, in the county of Wayne, and a supplement to the act entitled, an act to incorporate the borough of Honesdale, in Wayne county, and for other purposes.

165. A further supplement to the act entitled an act to incorporate the city of Pittsburg, and for other purposes.

166. An act to incorporate the Philadelphia Fire and Inland Navigation Insurance company.

167. An act to incorporate the Yardleyville, Delaware Bridge company.

168. An act to incorporate the American Porcelain company.

172. An act to incorporate the Methodist Episcopal church at Tunkhannock, in the county of Luzerne.

173. An act to authorize the laying out a state road from Shippenville, in Venango county, to Ridgeway, in Jefferson county.

175. A supplement to an act entitled a supplement to the act to incorporate the Beaver Meadow rail road and coal company.

176. A supplement to an act entitled an act to incorporate the Norristown, Berks and Lehigh rail road company, and to extend the time of taking subscriptions of stock to the Brown's mills, Sankey's Gap and Alexandria turpice road company.

177. An act to alter the time of holding the courts in Mercer, Jefferson, Warren, McKean and Potter counties.

179. An act making provision for the education of the poor, gratis, and to repeal the act of the 1st of April, 1834, entitled an act to establish a general system of education by common schools.

180. A supplement to the act entitled, "an act authorizing the Governor to incorporate the Strasburg rail road, the Williamsport and Elmira rail road, the Marietta and Columbia rail road, the Portsmouth and Lancaster rail road, and incorporating a company to make the Oxford rail road," and relative to the Cumberland Valley rail road, and the Wrightsville, York and Gettysburg rail road.

### RESOLUTIONS.

1. Relative to the Meadville Arsenal.
2. Relative to public lands granted to Erie county.
3. Relative to the books in the Recorder's office in Bradford county.
4. Relative to the claim of James and Etherington Appleton.
5. Relative to George W. Henry, a contractor on the Pennsylvania canal.
6. For the relief of Rankin and Armstrong and John and Robert Knox, contractors on the Lycoming line of the Pennsylvania canal.
7. Relative to the claim of James Mackey.
8. Relative to that part of the Philadelphia and Columbia rail road which passed through the city of Lancaster.
10. Relative to the distribution of the Pamphlet Laws.
12. Relative to the Supreme Court.
15. Resolution relative to the removing of sand and gravel from the public ground, and to lay out a street from the capitol to the canal.
16. Resolution relative to the Chesapeake and Delaware canal.
17. Relative to the Franklin Bridge.
18. Relative to the claim of Benjamin Bear and others.
19. Relative to the commission of the Treasurer of Philadelphia county, arising from the collateral inheritance tax on the Girard estate.
20. Relative to the claim of John Kean and Hugh Curran.
21. Relative to the Gettysburg and Hagerstown turnpike road.
22. Relating to the removal and transfer or stock books of loans in the Auditor General's office to the bank of Pennsylvania.
23. To provide for the payment of certain costs on suits brought by the Commonwealth, and relative to the calculation of interest in the case of the Commonwealth versus Henry Baldwin.
24. Relative to the Peninsula at Presque Isle on Lake Erie.
25. Explanatory of the act passed the 12th of April 1831.
26. To authorize the Governor to bring suit in the

matter of a loan authorized by the act of the 16th of April, 1833.

27. Relative to the claims of Jane Parsons, widow and administratrix of William Parsons, deceased, late a contractor on the Juniata division of the Pennsylvania Canal.

From the Franklin Repository.

### INLAND TRADE.

Notwithstanding the transportation of produce and merchandise from East to West by the Pennsylvania Canal and rail way, the transportation through Chambersburg by wagons on the turnpike to and from Baltimore, is greater for the last six months than it has been for 15 years. The receipts of tolls at the turnpike gates, are certain evidence of the state and amount of this inland trade.

The tolls received on the Chambersburg turnpike of 15 miles in the direction of Gettysburg and Baltimore, for six months, from the 1st of November last to the 1st of May inst., are \$3487 17, a sum surpassing considerably the receipts of tolls, on the road in the same six months for more than 15 years. The managers of this Company on the 4th instant, declared a dividend of  $4\frac{1}{2}$  per cent. on the stock for the last six months, though expenses of repairs had been increased by reason of the increase of travel on the road. On the first Monday of November last, a dividend was declared of  $3\frac{1}{2}$  per cent. on the same, for the preceding six months.

The receipts of toll on the same road in 1820, for the six months, from 1st November to 1st May, were

		\$2120 00
In 1825, for the same six months,		2020 90
1830,	do do	2646 30
1835,	do do	3487 17

Nine-tenths of the transportation on this road is believed to be to and from the Baltimore market; and as this turnpike is a part of the direct road from Baltimore to Pittsburg, the increase of tolls is evidence, that Baltimore still enjoys with western Pennsylvania by this means of intercourse, a trade greater than she has before possessed.

The tolls received at the three Turnpike gates west of Chambersburg, being in the direction of Pittsburg, for the last six months, show the trade that is entirely west of this to be great.

The tolls received at those three gates, and for stages for a distance of about 20 miles,

for November last, were	\$585
December,	497
January,	538
February,	766
March,	993
April,	987

\$4,366

The transportation by wagons on the turnpike north of Chambersburg, in the direction of Harrisburg and Philadelphia, has diminished considerably since the transportation was opened by the Pennsylvania Canal to the west.

The tolls received at the one gate north of Chambersburg, being for five miles, for one year, from

1st April, 1833, till 1st April, 1834,	\$1653 00
do 1834, do 1835,	1039 25

In the month of February last, there passed this gate, according to an account kept by the present attentive gate keeper, 259 western road wagons, and in March, 279; which was a great increase of that business over the preceding eight months.

It is manifest that the Pennsylvania canal, will still leave a large amount of transportation to be made by wagons on turnpike roads, until other facilities are furnished. During the season that canal navigation is in-



interrupted, the transportation by the turnpike road wagons will be immense and increasing; and from the experience of the present season, there is reason to believe, that even during the canal season, there will still be a considerable transportation by the turnpike wagons. There is also reason to think that the trade will increase so much between the eastern cities and the west, that the Pennsylvania Canal will not be sufficient to accommodate it.

The rail road proposed to be made from Harrisburg to Chambersburg, would afford such facilities of transportation from Chambersburg to Philadelphia, as would occasion almost an entire diversion of the trade by the turnpikes east and north of Chambersburg. It would also attract a large portion of the trade of Franklin county, which also passes to the Baltimore market, by the Waynesborough turnpike, or by the way of Hagerstown; and it would also supply the towns of Carlisle, Shippensburg, and Chambersburg, and the whole Cumberland Valley, with coal and lumber from the Susquehanna, the demand for which, at the prices then required, would produce the transportation of these articles to a large amount, and which now from the expense are used in very small parcels.

The advantages to Philadelphia of such a road, must be obvious, as it would give to her a large trade now possessed by Baltimore. To the state as well as the rail road companies from Lancaster to Harrisburg, it must be advantageous, as the transportation on this road, would be so much added to the transportation on the Philadelphia and Columbia rail road, and the Lancaster and Harrisburg rail road.

The country through which this proposed rail road would pass, is so well known, as peculiarly favourable for the location and construction of such a road, that it is deemed unnecessary to remark on the many circumstances that exist in relation to it, that would lessen the expense of construction and afford a road with but little elevation. C.

#### PREMIUMS OFFERED BY THE FRANKLIN INSTITUTE.

Address of the Committee on Premiums and Exhibitions of the Franklin Institute of the State of Pennsylvania, for the promotion of the Mechanic Arts: with a List of the Premiums offered to competitors at the Ninth Exhibition, to be held in October, 1835.

#### ADDRESS

*To the Manufacturers and Mechanics of the United States.*

The Committee on Premiums and Exhibitions of the Franklin Institute of the State of Pennsylvania for the promotion of the Mechanic Arts, respectfully announce that the Ninth Exhibition of American Manufactures, under the auspices of the Institute, will be held in the city of Philadelphia, from the 6th to the 10th day of October, 1835.

The Committee, with an anxious desire to make the Exhibition as extensively useful as possible, addressed invitations to the several Associations of Mechanics in this city requesting them to suggest such objects for premiums as the present state of their respective trades required; and they are happy to state, that the Stone Cutters' Company have authorised the distribution of several pecuniary premiums.

The list of premiums offered is larger, and embraces a greater variety of objects than on any former occasion, and has been framed with special reference to those branches of native industry which need the fostering care of the public, and contribute to render our country truly independent of foreign nations for a supply of the necessary articles of domestic comfort. Inviting for this effort to promote the Mechanic Arts the same confidence and support which have hitherto been given, we take the liberty to offer a few remarks on

what appear to us to be objects of the first importance in an exhibition of Domestic Manufactures.— They are, to present to the public in a convenient compass, specimens of the ability of our artisans to fabricate those articles which are needed for daily use in all the departments of civilized society, and by competition in the display from different manufactories, to exhibit, for the benefit of all, not only the perfection and taste, but also the defects of each; thus raising the standard of excellence, and producing, by an honorable and open appeal to disinterested judges, the stimulus of hope to the unsuccessful, and the cheering influence of victory to the successful competitor. Whilst the Committee are anxious that the regular products of the manufactories and work shops of their fellow citizens should form the mass of the exhibitions, they do not wish to be understood as at all opposed to the display of those beautiful specimens of Art which daily emanate from the hands of our artisans. On the contrary, they will receive them with pleasure, and cheerfully give those rewards which are due to superior workmanship, and to elaborate and costly works.

To display fully the vast extent of our manufacturing industry, and its importance as one of the vital parts of our civil institutions, the Exhibitions of the Franklin Institute were established, and have been steadily pursued. Those entrusted with the management of them, have been anxiously and impartially interested for the reputation and success of all the depositors; and it is believed, with a fair allowance for the fallibility of human judgment, they have hitherto succeeded in administering their arduous and delicate duties to general satisfaction.

Pledging ourselves to use all possible care in the selection of Judges, and to give to the necessary regulations for conducting the Exhibition due effect, we confide the subject to your hands, under the belief that you will make it worthy of the Institution, of yourselves, and of our country.

SAMUEL V. MERRICK,  
JOSHUA C. HARKER,  
WILLIAM H. KEATING,  
FREDERICK FRALEY,  
ISAAC B. GARRIGUES,  
ALEXANDER MCCLURG,  
ALEXANDER FERGUSON,  
JOHN C. CRESSON,

*Committee on Premiums and Exhibitions.*

Published by order of the Board of Managers.

GEORGE FOX, Chairman.

WILLIAM HAMILTON, Actuary.

*Philadelphia, April 16, 1835.*

#### REGULATIONS

*Of the Ninth Exhibition of Domestic Manufactures to be held in the City of Philadelphia, on the 6th, 7th, 8th, 9th and 10th days of October, 1835.*

1. The Exhibition room will be prepared to receive the goods on Saturday the 3d of October, and opened for the admission of visitors on Tuesday the 6th of October, at 10 o'clock, A. M.

2. All goods intended for competition must be deposited before 12 o'clock, (noon,) on Tuesday the 6th of October.

3. The Judges shall be appointed on the twenty-ninth of September, and a list of them published in one or more newspapers.

4. To insure a perfect impartiality, the Managers of the Institute, and the Committee on Premiums and Exhibitions, and all firms or partnerships in which a Manager or a Member of the Committee on Premiums and Exhibitions is interested, shall be excluded from competition; and no Committee shall award a premium or compliment to any of its members.

5. No premium shall be awarded for an article that

has received one at any other public exhibition; and none shall receive a premium that is not equal in quality to the best articles of similar manufacture, presented at former exhibitions.

6. Whenever the price is made a condition of premium, the makers must engage to furnish the required quantity at the price affixed.

7. Proof of origin must be furnished, if required, for every specimen offered for exhibition.

8. The Managers reserve to themselves the privilege of withholding a premium, whenever the article is deemed not to deserve it.

9. Should articles of extraordinary merit be presented, the Managers will with pleasure extend premiums to them, although not embraced in the annexed list.

10. All articles deposited must be accompanied by an invoice, stating the names and residences of the makers and depositors.

11. Arrangements will be made to exhibit to advantage any working models that may be sent in for exhibition, and the Managers respectfully invite contributions in this branch. Experience has shown the interest which the public take in them; and the Managers are impressed with a conviction that the display of them is calculated to convey useful information. A careful and competent superintendent will be provided.

12. The mornings of each day, until fifteen minutes before 10 o'clock, shall be appropriated to the Judges.

13. Neither owners nor depositors of goods shall be admitted to the exhibition room during the time appropriated to the Judges, except at the special request of the Judges of the articles owned or deposited by them.

#### LIST OF PREMIUMS.

##### 1835.

1. To the person who shall manufacture in the United States the greatest quantity of iron from the ore, during the year, using no other fuel than anthracite, quantity to be not less than twenty tons.

*A Gold Medal.*

2. To the person who shall manufacture in the United States the greatest quantity of iron from the ore, during the year, using no other fuel than bituminous coal, or coke, the quantity to be not less than twenty tons.

*A Gold Medal.*

3. To the person who shall manufacture in the United States the greatest quantity of iron from the ore, during the year 1835, using coke or charcoal, the combustion to be sustained by air heated to 500° Fahr. or upwards.

*A Gold Medal.*

4. To the inventor of any plan by which iron ore may be smelted with anthracite. The process to be communicated, and the model of the furnace to be exhibited at the exhibition, and referred to the Committee on Science and the Arts.

*A Gold Medal.*

5. To the maker of the best constructed cooking apparatus, in which anthracite is exclusively used, and superior to any now in use.

*A Silver Medal.*

6. To the maker of the best rifle gun, half stock, and ribbed barrel, with percussion lock and double triggers, to carry a ball of from 40 to 60 to the pound, and not to exceed twenty dollars in price.

*A Silver Medal.*

One to be exhibited, and twenty to be furnished at the same price within six months, if required.

7. To the maker of the best rifle gun, with percussion lock and double, or hair, triggers, to carry a ball of 60 to 100 to the pound.

*A Silver Medal.*

No limitation being fixed as to the price of the rifle in this premium, it is to be understood that in the award of it, the beauty as well as the excellence of the workmanship will be considered.

8. To the maker of the best double barrelled fowling piece, with percussion locks.

*A Silver Medal.*

9. To the maker of the best vegetable oil that will answer as a substitute for olive oil for manufacturing purposes. Not less than one hundred gallons to be made.

*A Silver Medal.*

10. For a method, verified by actual experiment, of rendering oil more fit, than any now in use, for chronometers and watches, particularly in being less liable to become thick, or rancid.

*A Silver Medal.*

A full account of the expemts to be produced to the Institute, and of the process employed, with satisfactory certificates, together with a specimen of the oil.

11. For a method of making a black writing ink, indestructible by chemical applications, superior to any at present known; that will flow freely and not corrode a pen made of steel or other metal.

*A Silver Medal.*

Certificates that not less than two gallons of such ink has been actually prepared, with a full detail of the process of making it, and two quarts of the ink to be produced to the Institute.

12. For the best composition for printer's ink, superior to any hitherto known, and fit for the finest kind of copper-plate printing.

*A Silver Medal.*

Certificates that no less than one hundred pounds of such ink has been made, with a full detail of the process employed, and ten pounds of the ink to be produced to the Institute.

13. To the maker of the best white vellum quarto post paper, made from the best No. 1, domestic rags, weighing not less than eight pounds per ream. Not less than one hundred reams to be made, and ten reams to be exhibited.

*A Silver Medal.*

14. To the maker of the best quarto post paper at three dollars per ream, of domestic rags, No. 1; security to be given to furnish any quantity not exceeding two hundred reams of the same quantity at that price.

*A Silver Medal.*

15. For the best specimens of medium printing paper, weighing not less than twenty-four pounds per ream, the price not to exceed three dollars and fifty cents per ream; five hundred reams to be made, and ten reams to be exhibited.

*A Silver medal.*

16. For the best specimen of Bristol boards, made entirely from linen, of foolscap, demy, medium, and royal size; of 2, 3 and 4 sheets in thickness; one groce each to be made, and one dozen each to be exhibited.

*A Silver medal.*

17. For the best specimen of hand made drawing paper, of the various sizes, from demy to antiquarian—made entirely from linen—equal to Whatman's; the surface not to be smooth.

*A Silver medal.*

18. To the maker of the best double crown tissue paper, fine quality, white. Not less than one hundred reams to be made, and at least five reams to be exhibited.

*A Silver medal.*

19. To the maker of the best double crown tracing paper, equal to the best French *papier vegetal*. Not less than ten reams to be made, and at least one ream to be exhibited.

*A Silver medal.*

20. To the maker of the best folio copying paper, fine quality, blue, equal to the English. Not less than one hundred reams to be made, and at least one ream to be exhibited.

*A Silver medal.*

21. For the best specimen of fine glazed ground paper hangings, of five original patterns; fifty pieces of each pattern to be made, and ten pieces of each pattern to be exhibited.

*A Silver medal.*

22. For the best specimen of paper hangings suitable for band-box, window curtains, &c. of five original patterns; fifty pieces of each pattern to be made, and ten pieces of each pattern to be exhibited.

*A Silver medal.*

The premiums No. 21 and 22 will be awarded to the competitors who shall excel in the greatest number of patterns.

23. To the manufacturer of the best specimens of porcelain.

*A Silver medal.*

The specimens to constitute a tea set of not less than seventy-two pieces. In awarding this premium, the texture of the ware, its colour, painting, gilding, and the elegance and tastefulness of the forms, will be taken into consideration.

24. To the manufacturer of the best dinner set of blue and white china, of not less than one hundred and twenty pieces.

*A Silver medal.*

The same considerations as in the preceding will influence the award of this premium.

25. To the manufacturer of the best queensware, white, or cream coloured, edged, painted, and printed. Not less than twenty crates to be made, and at least one crate of assorted articles to be exhibited.

*A Silver medal.*

26. To the manufacturer of the best white or coloured ointment jars, suitable for apothecaries' use.—The jars to be assorted, as follows: with flat caps, with canopy or bell caps, and without caps, lipped for leather or bladder; the sizes to be assorted from one gill to one gallon. Not less than one crate to be made, and at least one dozen of each size to be exhibited.

*A Silver medal.*

27. To the maker of the best and most extensive variety of cut glass.

*A Silver medal.*

In awarding this premium, the judges will examine whether the glass is transparent and colourless, free from flaws, or air bubbles—the forms tasteful and symmetric—the cutting regular and chaste—and the specimens combining most of these qualities in the greatest variety of pieces, shall be deemed the best.

28. To the manufacturer of the best plate glass, not less than fifty square feet to be exhibited.

*A silver medal.*

29. To the manufacturer of the best white glass mortars and pestles, of assorted sizes, from one gill to one quart; the bottoms of the mortars to be perfectly circular, and the ends of the pestles to be of the same curve.

*A silver medal.*

30. To the maker of the best and most extensive variety of mantel, astral, or hanging lamps.

*A silver medal.*

31. To the maker of the best gas chandeliers, or burners; pendants, branches, or mantels.

*A silver medal.*

In the award of these premiums, due regard will be paid to the construction of all the lamps in their parts, to propriety and elegance of form, and to the excellence of the workmanship, in every respect.

32. To the maker of the best secretary and book-case, superior to any heretofore exhibited.

*A silver medal.*

33. To the maker of the best set of cabinet chairs, and sofa, to match; not less than twelve chairs and one sofa to be exhibited.

*A silver medal.*

34. For the best upright, or square piano.

*A silver medal.*

In awarding this premium, regard will be had to the quality of the instrument, exclusively, without any reference to the cabinet work.

35. For the best cast iron hollow ware, for culinary

purposes, tinned inside, to be equal to the best British goods of the same description; not less than one dozen pieces to be exhibited.

*A silver medal.*

36. To the maker of the best specimens of malleable cast iron; not less than one hundred pounds to be exhibited; and in pieces weighing from one-half to eight ounces.

*A silver medal.*

37. For the best bell-metal kettles, not less than one dozen to be exhibited.

*A silver medal.*

38. For the best iron wire, of assorted numbers, from No. 7 to 25; not less than two hundred pounds to be exhibited.

*A silver medal.*

39. For the best earl wire, of assorted numbers, from 30 to 35; not less than two hundred pounds to be exhibited.

*A silver medal.*

40. To the maker of the best copper wire, from No. 7 to No. 25; two hundred pounds to be exhibited.

*A silver medal.*

41. For the best brass wire of assorted numbers, from 7 to 25; not less than two hundred pounds to be exhibited.

*A silver medal.*

42. For the best cast-steel hand, and pannel saws, 26 inches long; not less than one dozen of each to be exhibited.

*A silver medal.*

43. For the best cast-steel iron back saws, assorted, from ten to eighteen inches long; not less than two dozen to be exhibited.

*A silver medal.*

44. For the best edge tools for the use of carpenters and joiners; not less than two dozen tools of different kinds to be exhibited.

*A Silver Medal.*

45. For the best set of table cutlery, to consist of not less than fifty-one pieces.

*A Silver Medal.*

46. For the best cast steel files, from 6 to 14 inches in length, rough, bastard, and smooth cut, not less than one dozen of each kind to be exhibited.

*A Silver Medal.*

47. For the best specimen of dental files, assorted sizes; not less than one dozen of each to be exhibited, the Committee to have the privilege of having them proved.

*A Silver Medal.*

48. For the best trowels for the use of stone masons, bricklayers, and plasterers, not less than one dozen of each to be exhibited.

*A Silver Medal.*

49. For the best tea set of silver plated goods.

*A Silver Medal.*

50. For the best tea set of Britannia metal goods.

*A Silver Medal.*

51. For the best specimen of pen and pocket knives, razors, scissors, &c.; not less than two dozen of assorted kinds to be exhibited.

*A Silver Medal.*

52. To the maker of the best set of surgical instruments.

*A Silver Medal.*

53. For the best bar iron, from two to five inches square; and round iron, from two to five inches in diameter; not less than five tons of each to be made, and five hundred pounds of each to be exhibited.

*A Silver Medal.*

The iron to be packed and faggoted under the hammer or rollers, and the welds to be perfect.

54. For the best cast steel, of assorted sizes; not less than two hundreds pounds to be exhibited.

*A Silver Medal.*

55. For the best stock or standing vices, equal to those known by the name of tower vices; not less than five to be exhibited, and to weigh from 30 to 80 pounds.

*A Silver Medal.*

56. For the best anvils, equal to the Mousehole anvils, assorted sizes, from 1 cwt. to 2 cwt.; not less than five to be exhibited. *A Silver Medal.*

57. For the best wood screws, of iron or brass, assorted sizes, from one-fourth of an inch to three inches; not less than fifty groce to be exhibited. *A Silver Medal.*

58. For the best screw augers, of assorted sizes, from two to eight quarters; not less than one dozen of each size to be exhibited. *A Silver Medal.*

59. For the best butchers' knives from five to eight inches long; not less than two dozen to be exhibited. *A Silver Medal.*

60. For the best saddlers' tools. A complete assortment to be exhibited. *A Silver Medal.*

61. For the best sheet iron, equal to that made in Russia, not less than one hundred sheets to be exhibited. *A Gold Medal.*

62. For the best sheet iron, equal to that made in England, not less than one hundred sheet to be exhibited. *A Silver Medal.*

63. To the maker of the best spirit level for the use of machinists. *A Silver Medal.*

65. To the maker of the best mountain barometer, which shall combine portability with great accuracy and durability. The scale to be divided by the aid of a vernier into at least the thousandth part of an inch; with thermometers attached to the instrument, and divided according to Fahrenheit's scale, at least into degrees. The case for enclosing the barometer in travelling, should serve as a stand for it when in use. *A Silver Medal.*

65. To the maker of the best theodolite. *A Silver Medal.*

The instrument to be provided with an achromatic telescope, furnished with a sun shade, and reading both in the horizontal and vertical planes, by means of verniers to 30 seconds. The horizontal circle numbered to 360°. The graduated circles, or arcs, and verniers, to be of silver, and all the movements by tangent screws; these instruments to be provided with fixed eye glasses.

The principles governing the construction; the results from the actual trial; the appropriateness of the alloys; the propriety in the strength of the different parts; the entire weight and portableness, and the workmanship generally, will decide the premium for this instrument.

66. To the maker of the best level. *A Silver Medal.*

The spirit glass to be about eight inches in length, with an erect achromatic telescope provided with a sun shade.

The considerations governing the award in this case to be similar in those for the theodolite. The facilities in making the adjustment, and their permanency being of primary importance in this instrument, these considerations will have a corresponding influence in making the award.

67. To the maker of the best surveyor's compass. *A Silver Medal.*

The needle to be about six inches in length. The graduations to extend to half degrees. The instrument to be provided with the tripod staff. The considerations determining the awards for the theodolite and level will decide the merits of this instrument.

68. To the maker of the best levelling staff. *A Silver Medal.*

The staff to be of wood, armed with sockets; graduated decimally, and to read by verniers, to the thousandth part of a foot; the wood ensuring sufficient strength without inconvenient weight and liability to

warp; and the facility and accuracy in use are the considerations which will govern the award in this case.

It is recommended that until the premiums on Nos. 65, 66, 67, and 68 are awarded, the maker's names be omitted from the instruments. Should these four premiums be awarded to the same maker, then, instead of giving him the four silver medals, he shall be entitled to *A Gold medal.*

69. To the maker of the best surveyors' chains, fifty or sixty-six feet long, and containing one hundred links of equal length, and divided decimally by pronged markers; the wire employed in their manufacture must be cut and worked by machinery. *A Silver medal.*

70. For the best portable scales to weigh from three to twelve hundred pounds. *A Silver medal.*

71. For the best balances, of the more delicate kind, for the use of apothecaries and for gold assayers. *A Silver medal.*

72. For the best sample of drab and olive bang-up cords and velveteens, not less than two hundred yards to be exhibited. *A Silver medal.*

73. For the best samples of  $\frac{3}{4}$  and 4-4 superfine shirtings, similar to the British long cloths. *A Silver medal.*

74. For the best samples of 6-4 cambric muslin, made of yarns from number forty to one hundred and twenty; not less than five pieces of twelve yards each to be exhibited. *A Silver Medal.*

75. For the best samples of 6-4 checked and corded cambric muslins, not less than five pieces of twelve yards each to be exhibited. *A Silver medal.*

76. For the best sample of 6-4 book muslin, made of yarns from No. 100 to No. 200, not less than five pieces, of ten yards each, to be exhibited. *A Silver medal.*

77. For the best specimen of fancy power loom weaving. *A Silver medal.*

78. For the best specimen of wollen and worsted vestings. *A Silver medal.*

79. For the best specimen of white or printed Marseilles vestings. *A Silver medal.*

80. For the best specimen of Marseilles Quilts for beds, at least from 12 to 14 quarters. *A Silver medal.*

81. For the best sample of furniture chintz, not less than five colours, at least five pieces of twenty-eight yards each, to be exhibited. *A Silver medal.*

82. For the best sample of rich chintz prints, for ladies' dresses, not less than five colours, and not less than five pieces of twenty-eight yards each, to be exhibited. *A Silver medal.*

83. For the best sample of two coloured prints, the price not to exceed eleven and a half cents per yard, not less than five pieces, of twenty-eight yards each to be exhibited. *A Silver medal.*

84. For the best samples of 6-4, 7-4, or 8-4 printed cotton shawls, to measure square, and not less than five dozen to be exhibited. *A Silver medal.*

85. For the best sample of cotton handkerchiefs, in imitation of the plaid Madras, to measure square, and made of yarn not under number forty; not less than ten dozen to be exhibited. *A Silver medal.*

86. For the best samples of 4-4 fancy striped or checked gingham, in imitation of the Scotch, of yarn number forty-five or upwards, not less than ten pieces of equal lengths, to be exhibited. *A silver medal.*

Colours of all cotton goods to be permanent.

87. For the best sample of diaper, in imitation of the Russia; it must be twenty three inches wide, and made of flax thread; one hundred yards, or upwards, to be exhibited. *A silver medal.*

B. A. Smith's shell.

88. For the best sample of 8-4, 10-4, or 12-4, linen table damask, or linen damask table cloths.

*A silver medal.*

89. To the manufacturer of the best specimen of linen shirting, to be equal to the Irish, not less than fifty yards, to be exhibited.

*A silver medal.*

90. For the best sample of pantaloons stuffs  $\frac{3}{4}$  to  $\frac{7}{8}$  wide, all cotton, or cotton and wool, not less than two hundred yards to be exhibited.

*A silver medal.*

91. For the best sample of ladies' white cotton hose, not less than five dozen to be exhibited, and to be put up as well as the imported article.

*A silver medal.*

92. For the best sample of ladies' black worsted hose, not less than two dozen to be exhibited, and to be put up as well as the imported article.

*A silver medal.*

93. For the best sample of silk vestings.

*A silver medal.*

94. For the best samples of Silk Plush, suitable for the manufacture of Silk Hats, equal to the article now imported for that purpose, not less than fifty yards to be exhibited.

*A silver medal.*

95. For the best sample of sewing silk, blue, black, and assorted colours, not less than five pounds of sixteen ounces each to be exhibited, to be put up after the manner of the Italian.

*A silver medal.*

96. For the best sample of printed silk pocket handkerchiefs, to measure square, not less than three pieces, of seven handkerchiefs each, to be exhibited.

*A silver medal.*

97. For the best sample of satinnet, not less than twenty-seven inches wide, not less than five pieces to be exhibited.

*A silver medal.*

98. For the best sample of single or double milled cassimeres, all to be permanent colours, not less than five pieces to be exhibited.

*A silver medal.*

99. For the best sample of superfine blue or black cloth, permanent colours, not less than sixty inches wide, and exclusively American, not less than five pieces to be exhibited.

*A silver medal.*

100. For the best sample of blue cloth, indigo dye, to measure not less than fifty-four inches wide, price not to exceed three dollars per yard, and not less than five pieces to be exhibited.

*A silver medal.*

101. For the best sample of fancy coloured cloth, to measure not less than fifty-four inches wide, and not less than five pieces to be exhibited.

*A silver medal.*

102. For the best samples of milled drab cloth, to measure not less than forty-five inches wide, price not to exceed one dollar and fifty cents per yard, and not less than five pieces to be exhibited.

*A silver medal.*

103. For the best samples of red and green baize, not less than five pieces to be exhibited.

*A silver medal.*

104. For the best article for Negro clothing, made of cotton, twilled, at least thirty inches wide, five pieces to be exhibited.

*A silver medal.*

105. For the best sample of ingrain carpeting, thirty-six inches wide, not less than sixty yards to be exhibited.

*A silver medal.*

106. For the best sample of Venetian carpeting, twenty-seven or thirty six inches wide, not less than sixty yards to be exhibited.

*A silver medal.*

107. For the best sample of Brussels carpeting, not less than forty yards to be exhibited.

*A silver medal.*

108. For the best sample of three point blankets, in imitation of the Mackinaw blankets, to measure not less than six feet six inches long, by five feet six inches

wide, to weigh at least eight pounds six ounces per pair, five pair to be exhibited.

*A silver medal.*

The stripe and point marks to be indigo blue.

109. For the best bed blankets, either rose or whitney, to measure at least 10-4 wide, by 12-4 long.

*A silver medal.*

110. For the best cotton blankets, 9-4 by 4-4, three pair to be exhibited—stripes at the ends to be of fast colours.

*A silver medal.*

111. For the best blankets made of cotton and wool, to measure six feet long and five feet wide, five pair to be exhibited.

*A silver medal.*

112. For the best specimen of leather, in imitation of Russia, one dozen skins to be exhibited.

*A silver medal.*

113. For the best specimens of white sheep skins, suitable for apothecaries use; finished equal to the article now imported from France. Three dozen skins to be exhibited.

*A silver medal.*

114. For a method, superior to any now in use, of rendering leather water proof, without injuring its texture or pliability.

*A silver medal.*

A full account of the process, with samples of the leather in its unprepared and prepared state, to be produced to the Institute.

115. For the best perspective drawing of machinery, by a pupil of the drawing school of the Institute under the age of twenty-one years.

*A silver medal.*

116. For the best carving in wood of any enriched border or ornament, from the carver's own design.

*A silver medal.*

117. To the maker of the best copal varnish for coach bodies, not less than three gallons to be deposited, to be tested by twelve months' use.

*A silver medal.*

118. For the best specimen of coach steps, uniting lightness and durability, not less than half a dozen sets to be exhibited.

*A silver medal.*

119. For the best specimen of axles for carriages, uniting safety, simplicity, and the capability of containing oil, and economy of cost, price to be marked on them.

*A silver medal.*

120. For the best specimens of coach springs embracing lightness, beauty of form, and strength.

*A silver medal.*

121. For the best specimens of black fur hats, the price not to exceed six dollars, and five hundred to be furnished at the same price if required; six hats to be exhibited.

*A silver medal.*

122. For the best specimens of black fur hats, the price not to exceed four dollars. Five hundred to be furnished at the same price, if required, six hats to be exhibited.

*A silver medal.*

123. For the best specimen of marble mantels, combining chastity of design with superiority of execution.

*A silver medal.*

124. For the best piece of carving in marble.  
*A silver medal, and a premium of the value of twenty dollars.*

125. For the second best.  
*A premium of the value of fifteen dollars.*

126. For the third best.  
*A premium of the value ten dollars.*

127. For the fourth best.  
*A premium of the value of five dollars.*

128. For the best Urn in marble, for a monument.  
*A silver medal and a premium of the value of fifteen dollars.*

129. For the second best.  
*A premium of the value of ten dollars.*

130. For the third best.

*A premium of the value of five dollars.*

In the above, the quality of the marble to be taken into consideration.

131. For the best specimen of letter cutting.

*A silver medal and a premium of the value of fifteen dollars.*

132. For the second best.

*A premium of the value of ten dollars.*

133. For the third best.

*A premium of the value of five dollars.*

134. For the fourth best.

*A premium of the value of five dollars.*

135. For the fifth best.

*A premium of the value of five dollars.*

Not less than one hundred and fifty letters to be exhibited, in equal proportions of the three different kinds in general use, about one half to be capitals.

In all cases the time the competitors have been at the trade, will be taken into consideration by the committee in awarding the Premiums.

The above premiums from No. 124 to 135 both inclusive, are offered at the request of the Stone Cutters Company of the city and county of Philadelphia. The competition will be confined to the apprentices of the members of that society, who will pay the premiums awarded in such manner as they may deem most to the interest of the successful competitors. The Franklin Institute furnishing the silver medals.

### METEOROLOGICAL REGISTER.

*Extract from the Meteorological Register, taken at the State Capital—Harrisburg, Pennsylvania.*

By JAMES WRIGHT, Librarian.

OCTOBER, 1834.

Day of the month.	Day of the week.	Sun rise.	1 o'clock, P. M.	Sun set.	Mean.	Height at sun rise.	Height at 1 o'clock, P. M.	Height at sun set.	Mean height.	Winds.	State of the Weather.
THERMOMETER.						BAROMETER.					
1	Wednesday,	68	64	68	67	29.90	29.78	29.74	29.81	W	Rainy day
2	Thursday,	68	73	70	70	60	70	70	67	W	Cloudy—fair
3	Friday,	55	67	67	63	90	90	86	89	W	Clear day
4	Saturday,	61	65	65	64	70	66	66	67	E	Rainy day
5	Sunday,	50	67	54	51	93	95	95	94	W	Clear day
6	Monday,	45	59	58	54	30.10	13	10	30.11	W	Frost—clear day
7	Tuesday,	46	65	63	58	16	14	10	13	SW	Cloudy day
8	Wednesday,	60	69	68	66	30.00	29.98	96	29.98	SW	Cloudy damp day
9	Thursday,	65	72	62	66	70	67	67	68	S	Rainy day
10	Friday,	50	55	53	53	90	99	30.10	97	W	Clear day
11	Saturday,	41	57	57	52	30.26	26	26	30.26	W	Frost—clear day
12	Sunday,	43	63	62	56	13	10	30.00	08	SW	Frost—sun and clouds
13	Monday,	50	53	49	51	29.80	76	76	29.77	NW	Rainy day
14	Tuesday,	41	45	45	44	80	80	90	83	NW	Sun and clouds
15	Wednesday,	32	46	45	41	30.03	03	03	30.03	NW	Frost—clear day
16	Thursday,	34	50	53	46	26	23	20	23	S	Cloudy day
17	Friday,	53	66	67	62	10	30.00	29.95	02	S	Clear day
18	Saturday,	53	72	71	65	29.86	69	57	29.71	S	Clear day
19	Sunday,	50	48	57	52	56	62	69	62	W	Rain—clear
20	Monday,	37	47	57	47	74	80	81	80	W	Clear day
21	Tuesday,	47	50	50	49	30.10	8	8	30.09	W	“ “
22	Wednesday,	39	54	59	51	29.88	80	80	29.80	SW	Sun and clouds
23	Thursday,	45	54	53	51	80	85	90	85	W	Clear day
24	Friday,	46	54	55	52	30.00	30.00	30.00	30.02	W	“ “
25	Saturday,	40	49	48	46	15	12	30.00	09	SE	Cloudy—rain
26	Sunday,	45	50	55	50	29.74	53	65	29.65	E	Rainy day
27	Monday,	45	53	53	50	80	76	80	79	W	Clear day
28	Tuesday,	40	50	51	47	76	80	90	82	W	“ “
29	Wednesday,	36	46	46	43	30.04	4	8	30.05	W	“ “
30	Thursday,	37	45	45	42	10	10	10	10	E	Cloudy day
31	Friday,	42	49	50	47	10	10	10	10	E	“ “

*Thermometer.*

*Barometer.*

Maximum on the 2d, . . . . . 70°  
 Minimum on the 15th, . . . . . 41  
 Difference, . . . . . 29  
 Mean, . . . . . 53

Maximum on the 11th, . . . . . 30.26 inches.  
 Minimum on the 19th, . . . . . 29.62 “  
 Difference, . . . . . 00.64 “  
 Mean, . . . . . 29.92 “

## REPORTS ON CITY RAIL ROAD.

(Concluded from page 335.)

## MR. STRICKLAND'S REPORT.

*To the Board of Commissioners appointed by Councils on the subject of Tramways, &c.*

Gentlemen,—In conformity with the resolution of the Board, requiring a communication from me on the best means of conveying merchandize between the wharves and the Broad street Rail Road, and on the best route and materials for the construction of the same, I have the honor to submit, for your consideration, the following plan and estimate upon which this important object may be obtained upon a scale commensurate with the facilities required by the merchants and traders of the city of Philadelphia.

Upon the most minute and strict examination of the documents furnished by the City Surveyor, and transmitted to me by the Secretary of the Board, I have been enabled to ascertain the grade of the principal streets from the River Delaware to the Schuylkill; from these it appears, that the ascents and descents of the east and west streets, do not exceed fourteen inches in one hundred feet, except in Walnut and Chestnut streets, and in the immediate rise from both these rivers at all these streets. On the Delaware, Dock and Spruce streets afford the most easy grade for a Tram or Rail Way; and on the Schuylkill, Market street from the intersection of Ashton street to the Broad street Rail Way is most regular and uniform in its ascending grade. The descent of Market street from its summit at Broad street to the intersection of Delaware Fourth street, is, with one trifling exception, less than one foot in one hundred feet. From Fourth to Third streets, the ascent is about seventeen inches in the one hundred feet, and from the junction of Market and Third streets, the descent to Dock street is about fourteen inches to the one hundred feet, and from Dock street and Third to the Drawbridge lot and landing, the descent is but eleven feet in about two thousand. It appears, upon a review of these various grades of the streets running in an east and west direction, that, with the exception of Spruce street on the Delaware front, the best route for a communication between the wharves and the Broad street Rail Road is from the Drawbridge up Dock to Third, up Third to Market, and up Market to the Broad street Rail Way, and from thence along Market to Ashton street on the Schuylkill front; all other approaches from the Delaware being considered too precipitous for the ascent or descent of burthen-cars, without the use of fixed machinery, brakes, or clogs.

As to the best means of conveying merchandize along any route connected with the Broad street Rail Way, it is obvious that a continuation of the same plan of rails, to which all the cars are adapted, would be attended with the least inconvenience or expense. The introduction of Tram Ways, or long flat stone jointed together, would require an alteration in the form of the car wheels; the flange must be increased in breadth, and formed into a tire of larger diameter than that which now traverses the Rail Ways. The idea of forming Tram Ways, was suggested by several gentlemen some time ago, as an expedient to get rid of any interference with the passage of ordinary wagons and market cars in the immediate vicinity of the market houses, thereby making this great avenue equally eligible to all kinds of travelling and trade. However desirable this object may be, and the introduction of Tram Ways would be the best means of promoting and keeping up the present intercourse without much interruption, it is beyond the means afforded, either by Tram or Rail Ways, to carry into effect the great object of the merchants and traders in the conveyance of goods and merchandize along Market street, while the present Market houses are permitted to occupy this street.

Take down the market houses and the whole course is clear for a permanent and useful continuation of the Broad street Rail Way from river to river. The business of Market street has increased to such an amount as to demand this sacrifice, if it can be properly so called; at any rate, I believe, there are very few of our fellow citizens who are not strongly impressed with the conviction that these buildings are a serious obstacle to the city's interest in her daily increasing trade to the West.

The establishment of market places elsewhere, by an ordinance of Councils, with the consent of owners of property at a fair valuation for damages in particular places would undoubtedly have the effect to increase the value of all the ground fronting on the market places, and this increase of value would, in every instance, be a full equivalent for the surrender of a few feet to this object, and for the re-construction of the buildings fronting thereon.

Upon this estimate, however, the Board of Commissioners may form a better calculation than I can now pretend to; there is one fact very clear, that is, if the existence of market houses in Market street has had any thing to do with enhancing the value of property on that street, it is fair to suppose that their existence any where else would have the same effect; in all which calculations, I take it for granted, that their removal from Market street would, at this period of its abundant trade, secure great facilities to the prosperity of the city by affording a free and uninterrupted passage of the Rail Way from Broad street to the warehouses on this street, and along the wharves of the Delaware front.

In the event of the removal of the Market houses meeting the approbation of the Board of Commissioners, I propose for their consideration the following route and construction of Rail Way, viz: to curve the Broad street Rail Way into Market street with four separate tracks, two tracks six feet apart on the centre or crown of the street, and two tracks, one of which is to be laid within five feet of the curb stone one each side of the way. The foot pavements to be increased five feet more in width. In every square throughout the route, a *turn-out* should be formed from the *paris*, on each side of the centre or crown of the street, leading from and into the track near the curb to the track on each side of the centre; in other words, *branch tracks* from the right and left, on each side of the central Rail Ways.

These rails to be *edge rails* of the usual construction, composed of wrought iron, fixed by chains upon stone blocks, at the distance of three feet apart; the top of the rail to be *flush or level* with the surface of the pebble pavement, and protected on each side in a longitudinal direction by *granite flag-stone* of one foot in width; these stones are to be laid close to the rail on the outside of the tracks, and from two to three inches distance from the rails on the *inside*, so as to allow sufficient play for the dip of the flange of the car wheels.

The cost of laying this kind of a track, from the Broad street Rail Way down Market street to Third, down Third to Dock, and down Dock street to the Drawbridge wharf, together with the continuation of the track from Broad street along Market to Ashton street near the Schuylkill, will amount to \$270,000.— This estimate also includes a continuation of the tracks in Market street from Third to a point at the west side of Front street, where I propose to fix pivots for the return of the cars towards Broad street, so as to enable the traders, situated on the whole extent of Market street, to avail themselves of the same means of conveying their merchandize to and from their warehouses.

As the descent is too great at Market street from Front to Delaware Avenue, I propose to branch the Rail Way along the river front from the Drawbridge

wharf, north and south to Vine street and to South street. This portion of the road to have but two tracks laid parallel with each other, at the distance of five feet apart. The open space at the Drawbridge wharf will be found exceedingly convenient for *branches and turn-outs*, and for the establishment of machines for weighing the cars and their burthens. If a depot is necessary at all, this is the best possible position for its location, particularly so, if the wharves are planned for the reception of steamboats. My own views, however, are, that it would be inexpedient to establish any general depot—the facilities which would be afforded by the passage of the Rail Way along the proposed route would make every merchant's store a depot, and thereby save much labour and expense.

The public lot near the Drawbridge may be very advantageously converted into convenient scites for warehouses, for the purpose of storing goods; suitable buildings put up, at the cost of the city, to rent out, would serve all the purposes of a depot.

The importance of the great space at the Drawbridge to the route of the Rail Way along the wharves of the city, on the Delaware front, is of the highest character, inasmuch as it is the only point on the river where a rail road track could be conveniently and properly diverged into the contemplated avenue along the Delaware. The avenue, when completed, will have an outlet of easy grade into Dock street, and through this wide street, in the shortest direction to Market street. In conclusion, permit me to add, that the construction of a Rail Way in any other street than Market street, for the conveyance of merchandize between the wharves and the Broad street Rail Road, would be entirely out of place, and destructive to the established business transactions of the city, as well as the peace and private comforts of the more retired residents. Market street is now, and always must continue to be, throughout its whole length from river to river, a great storehouse, a trans-atlantic and Western Depot, and therefore the greatest space is required for the handling and transporting of heavy wares and merchandize.

With great respect, gentlemen,

I am your obedient servant,  
WILLIAM STRICKLAND.

#### REPORT OF THE MINORITY.

The undersigned, a minority of the members of the Commissioners, appointed by Councils "to enquire into the best means of conveying merchandize from the wharves to the Broad street Rail Road," &c., dissent to so much of the report of the Board, adopted by the Commissioners and signed by the President and Secretary, as recommends a temporary route down Eighth to Walnut, and down Walnut to Dock streets, because great detriment will thereby accrue to the property, both public and private, throughout the whole course of the contemplated temporary route. The public squares fronting on Walnut street, will no longer be a safe and pleasant resort for the citizens, especially to the young. Private dwellings must become temporary places for business, to the annoyance of families. The site on which the prison now stands cannot be disposed of for private residences so long as a Rail way passes in front of it, nor for stands for business, so long as Walnut street route is merely temporary. In lieu thereof, they beg respectfully to recommend to Councils, to continue a single track on each side of the Market houses from Eighth street eastward, which may be so laid down as to form the side or branch tracks contemplated throughout the permanent route when the Market houses shall have been removed, thus the whole cost of the temporary way will be saved to the city. In all other parts of the report they fully concur.

Respectfully submitted,

W. W. McMAIN,  
JOHN R. LATIMER,  
JAMES BOGGS.

Philadelphia, May 14th, 1835.

#### REPORT OF SYLVESTER WELCH, ENGINEER.

To Samuel Jones, Esq.

Superintendent of the Western Division of the Pennsylvania Canal and Allegheny Portage Rail Road.

SIR:—In obedience to instructions from the Secretary of the Board of Canal Commissioners, dated September 21st 1833, directing the engineer to communicate such information from his department as might be required, relative to the Western Division of the Pennsylvania Canal and Allegheny Portage Rail road. I have the honor to submit for the information of the Board the following report.

The first track including the second one, upon the inclined planes, and for the requisite number of turn-outs is now nearly finished. The work yet remaining to be done, is the laying of a part of the rails on seven of the sections, making in the aggregate, a distance of about two miles. The stone blocks and timber are principally laid upon this distance, and ready to receive the iron. The engines and machinery are finished, or very nearly so, and principally delivered at the inclined planes: the contractors are now engaged in putting them up. The ropes are all delivered at Hollidaysburg and ready for use. A statement, in detail of each part of the work, is given below.

The following tables shewing the grades, the horizontal curvature of the rail road, and the length, height, and inclination of the inclined planes, were inserted in my report of last year.

They are inserted here, to avoid the inconvenience of a reference to that report.

Horizontal curvature of the Portage Rail Road.

TABLE.

Deflections in the line at 100 feet.	Radius of curve.	Aggregate length of line in miles.	Deflections in the line at 100 feet.	Radius of curve.	Aggregate length of line in miles.
0°	Infinite	19.29	6°	935.40	2.22
1°	11459	0.05	6½	882.00	0.27
1½	5730	0.83	7	819.00	1.30
2	3820	0.19	7½	764.50	0.09
2½	2965	1.14	8	716.80	1.24
3	2292	0.29	8½	674.70	0.49
3½	1910	1.78	9	637.50	1.43
4	1637	0.38	9½	600.50	0.09
4½	1433	2.81	10	573.70	0.49
5	1274	0.17	10½	546.40	0.02
5½	1146	1.28	12	478.30	0.23
5¾	1042	0.25	13	441.70	0.52
				Miles, 36.63	

The following table exhibits the profile or grade of the Portage rail road. The first and second columns show the numbers of the stations between which the grade lies—the third column, the ascent to the summit of the mountain, and descent from the summit in one hundred feet—the fourth, the ascent, &c. per mile—the fifth, the length in miles of each grade—the sixth, the distance in miles from the lower end of the basin at Johnstown—the seventh, the total ascent from the basin at Johnstown to the summit of the mountain, and total descent from the summit to the basin at Hollidaysburg.



TABLE OF GRADES.

From No.	To No.	Ascent per 100 feet.	Ascent per mile.	Distance in miles.	Dist'ce from Johnstown.	Ascent from Johnstown.	
1	9	0.00	0.00	0.19	0.19	.00	
9	138	0.50	26.40	2.44	2.63	64.50	
138	215	0.48	25.344	1.46	4.09	101.46	
215	217	0.00	0.000	0.04	4.13		
217	233	10.00		0.30	4.43	251.46	Inclin'd plane no. 1.
233	234	0.00	0.00	0.02	4.45		Level.
234	409	0.20	10.56	3.31	7.76	286.46	
409	602	0.40	21.12	3.66	11.42	363.66	
602	676	0.15	7.92	1.40	12.82	374.76	
676	897	0.28	14.784	4.19	17.01	436.64	
897	919	0.20	10.56	0.42	17.43	441.04	
919	922	0.00	0.00	0.06	17.49		Level.
922	932½	8.00		0.33	17.82	573.44	Inclin'd plane no. 2.
932½	942½	0.00	0.00	0.06	17.88		Level.
942½	1015	0.20	10.56	1.37	19.25	587.94	
1015	1018	0.00	0.00	0.06	19.31		Level.
1018	1033			0.28	19.59	718.44	Inclin'd plane no. 3.
1033	1036	0.00	0.00	0.06	19.65		Level.
1036	1130	0.20	10.56	1.78	21.43	737.24	
1130	1133	0.00	0.00	0.06	21.49		Level.
1133	1155			0.42	21.91	925.10	Inclin'd plane no. 4.
1155	1158	0.00	0.00	0.06	21.97		Level.
1158	1287	0.20	10.56	2.44	24.41	950.90	
1287	1290	0.00	0.00	0.06	24.47		Level.
1290	1316			0.49	24.96	1152.54	Inclined plane no. 5.
1316	1319	0.00	0.00	0.06	25.02		Level.
1319	1387	0.28	14.784	1.29	26.31	1171.58	
1387	1401	0.00	0.00	0.27	26.58		Summit level.

From No.	To No.	Des't. per 100 feet.	Descent per mile.	Distance in miles.	Dist'ce from Johnstown.	Descent from Johnstown.	
1401	1428	10.25		0.51	27.09	266.50	Inclin'd plane no. 6.
1428	1436	0.00	0.00	0.15	27.24		Level.
1436	1463	10.25		0.51	27.75	527.00	Inclin'd plane no. 7.
1463	1466	0.00	0.00	0.06	27.81		Level.
1466	1495	0.20	10.56	0.51	28.32	532.40	
1495	1498	0.00	0.00	0.06	28.38		Level.
1498	1529	10.25		0.58	28.96	840.40	Inclin'd plane no. 8.
1529	1532	0.00	0.00	0.06	29.02		Level.
1532	1592	0.20	10.56	1.13	30.15	852.40	
1592	1595	0.00	0.00	0.06	30.21		Level.
1595	1622	7.25		0.51	30.72	1041.90	Inclin'd plane no. 9.
1622	1625	0.00	0.00	0.06	30.78		Level.
1625	1712	0.34	17.952	1.64	32.42	1071.48	
1712	1715	0.00	0.00	0.06	32.48		Level.
1715	1738			0.43	32.91	1252.00	Inclin'd plane no. 10.
1738	1741	0.00	0.00	0.06	32.97		Level.
1741	1836	1.00	52.80	1.80	34.77	1346.00	
1836	1902	0.67	35.376	1.25	36.02	1390.22	
1902	1907	0.00	0.00	0.69	36.11		Level.
1907	1920	0.67	35.376	0.25	36.36	1398.71	
1920	1935	0.00	0.00	0.29	36.63		Level.

A table shewing the inclination, the length measured horizontally, the length measured on the planes, the ascent or descent per one hundred feet, and the height or difference of level, between the head and foot of the inclined planes.

No.	Section.	Horizontal Length.	Length of Inclined planes.	Total rise in feet.	Rise per 100 feet.	Angle of Inclination.	Remarks.
1	7	1600.50	1607.74	150.00	10	5° 42' 38"	
2	24	1755.32	1760.43	132.40	8	4° 34' 26"	
3	27	1473.70	1480.25	130.50	9.5	5° 25' 36"	
4	30	2187.74	2195.94	187.86	9	5° 8' 34"	
5	34	2620.82	2628.60	201.64	8	4° 34' 6"	
6	36	2700.52	2713.85	266.50	10.25	5° 51' 9"	
7	37	2641.98	2655.01	260.50	10.25	5° 51' 9"	
8	38	3101.49	3116.90	307.60	10.25	5° 51' 9"	
9	40	2714.05	2720.80	189.50	7.25	4° 8' 48"	
10	42	2288.46	2295.61	181.52	8.25	4° 42' 58"	

The descent of the Inclined Planes is regular, from the top to a point two hundred feet from the foot.

The descent per one hundred feet is represented in the sixth column of the above table. The descent in the remaining two hundred feet, is the same as in the hundred feet above.

#### Grading.

The following table shows the length in feet of each section; the amount of the final estimate and the original estimated cost.

Sections.	Length in feet.	Amount of final estimate.	Original estimated cost.
No. 1	4300	\$7086 39	\$8099 70
2	2600	7257 93 $\frac{1}{2}$	6440 78 $\frac{1}{2}$
3	3500	2357 75 $\frac{1}{2}$	2706 80
4	2600	5067 38	5164 73
5	3000	2454 37 $\frac{1}{2}$	2801 24
6	5300	16,483 51 $\frac{1}{2}$	16,639 49
7	4200	68,777 22	47,019 29
8	4000	5537 85 $\frac{1}{2}$	5886 59
9	3800	7607 17	7144 45
10	5100	5474 19 $\frac{1}{2}$	5494 80
11	3800	23,794 31	26,822 01
12	3900	7987 79	7430 08
13	3000	4858 41	4225 16
14	4700	4503 52	5761 50 $\frac{1}{2}$
15	5900	12,279 12	11,033 70
16	4100	8668 19	9344 34
17	2700	6228 03	5376 36
18	3800	6494 60 $\frac{1}{2}$	7849 33
19	3200	2849 49	2974 95 $\frac{1}{2}$
20	3500	10,951 23	9530 53
21	4700	8126 90	7657 66 $\frac{1}{2}$
22	5600	10,906 32	9189 03
23	3400	6689 66	6151 28
24	3400	7063 57	8238 79
25	2700	2593 42 $\frac{1}{2}$	2836 14
26	4300	5950 15	6421 10
27	3700	22,989 35	22,269 57
28	3100	4170 00 $\frac{1}{2}$	3822 51 $\frac{1}{2}$
29	4200	13,702 75	14,966 80
30	3600	20,104 16	19,416 15
31	4400	5842 15	6423 50
32	4900	3833 83	2969 80
33	3400	2722 85	3497 80
34	4300	13,276 74 $\frac{1}{2}$	13,790 40
35	5000	6007 59	6470 63 $\frac{1}{2}$
36	5400	14,853 29	9250 06
37	4500	23,454 21	14,957 94
38	5700	14,837 12	14,564 40
39	5900	15,611 36 $\frac{1}{2}$	13,752 40
40	3900	6369 43	6460 20
41	5500	7571 04 $\frac{1}{2}$	9098 02 $\frac{1}{2}$
42	5400	13,311 86	12,954 18
43	5100	5914 34	4581 70
44	4900	5511 80	5497 75
45	4900	9073 69	8473 40
46	4700	4806 50	2516 50
		\$472,162 59 $\frac{1}{2}$	\$434,173 17 $\frac{1}{2}$

Allowed for contingencies in original estimates,

65,125 97

Original estimated cost of grading,

499,299 14 $\frac{1}{2}$   
472,132 59

\$27,136 55 $\frac{1}{2}$

Making the cost of the sections, twenty-seven thousand one hundred and thirty-six dollars fifty-five and three-fourth cents less than the original estimated cost, and

four thousand one hundred and ninety dollars and fifty-seven cents more than the estimate given in my report of November 1st, 1832.

The contracts for grading the Portage Rail road, are all completed except section No. 37, and final estimates have been reported to the superintendent. The high embankment on section No. 37, at the inclined plane, which was principally made during the dry part of the summer, settled very considerably, during the first heavy rain, and caused the slope wall on the outside to give way. The contract not being finished at the time, it was deemed advisable to retain the contractor to rebuild the slope wall and raise the embankments. The latter is built up high enough to receive the rail way superstructure. The wall is nearly rebuilt as far as is requisite for the protection of the bank this season.

The aggregate expense of grading, does not vary materially from the estimated cost given in my report of November 1st, 1832, and falls short of the original estimate, twenty-eight thousand four hundred and twenty-seven dollars and two cents. The cost of sections No. 36, and 37, exceeds the estimate of last year. The expense of the former was increased by extra work upon a part of the turnpike road, the location of which was changed and the road made new, where it crosses inclined plane, No. 7, and the latter by an increase in the quantity of slope wall, and the repairing of that which gave way. Some of the other sections exceed the estimate of last year, but the excess in all does not much exceed the seven per cent. added to cover the expenses of contingent or incidental work.

The masonry is all finished. Final estimates have been reported to the superintendent for three of the viaducts, viz: one over the Ebensburg branch of the Little Conemaugh; one over the mountain branch of the Little Conemaugh, and one over the Beaver Dam branch of the Juniata. The remaining one over the Little Conemaugh, at the Horse Shoe Bend, is finished, with the exception of part of railing. The final estimate of this, will correspond, in amount, with the estimate put down below, as there is no work to be done that will alter or change it.

Making the actual cost less than the original estimate,	7 per cent. allowed in original estimate,	Span of arch.	Rise of arch.	Cost of Viaduct.	Original estimated cost including 7 per cent for conting.
		Viaduct over the Horse Shoe bend,	80 ft.	54,562 24	49,760 00
		Viaduct over the Ebensburg branch,	40	8,828 05 $\frac{1}{2}$	9,079 80
		Viaduct over the mountain branch,	40	6,845 00	6,624 50
		Viaduct over the Beaver dam branch,	10 $\frac{1}{2}$ spans of 33 ft.	9,262 51 $\frac{1}{2}$	9,262 50
				\$79,755 81	\$74,726 80
				79,957 67 $\frac{1}{2}$	5,230 87 $\frac{1}{2}$
				79,753 81	201 86

#### COST OF VIADUCTS.

The bridge for the turnpike road on section No. 36, the only one built upon the rail road purposely for a road bridge, except the draw bridges at Conemaugh, is finished and reported final. The cost compared with the original estimate, stands as follows:

Cost of bridge,	\$2,327 44
Original estimated cost, including 7 per cent.	1,284 00
	<u>\$1,043 44</u>

Making one thousand and forty-three dollars and forty-four cents more than the original estimate. The principal cause of this increase in expense, was a change in the plan to a skew-bridge, in order to avoid an inconvenient bend in the turnpike road on a steep hill.

Final estimates have been reported for work done under all the contracts for building culverts. There are sixty-eight of these, twenty-eight of three feet span, seven of four feet, six of five feet, one of six feet, four of seven feet, two of eight feet, five of ten feet, three of twelve feet, three of fourteen feet, two of sixteen feet, four of eighteen feet, one of twenty feet, and two of twenty-five feet span. The cost of culverts compared with the original estimate, is as follows:

Original estimated cost including seven per cent. for contingencies,	\$36,965 16
Aggregate cost of the sixty-eight culverts,	<u>34,319 39½</u>

Making the cost less than the original estimate, by

\$2,645 76½

There are eighty-seven drains or culverts, built of dry masonry, from two to three feet square. They were built by the contractors for sections, and the cost of each will be found in the tabular statement numbered 1. These, with the culverts and viaducts, make one hundred and fifty nine passages for water, under the rail road.

The expenses for grading and masonry are as follows.

For grading,	\$472,162 59½
For masonry,	116,402 64½
	<u>588,565 24</u>
Original estimate of grading and masonry,	617,505 98
Making actual cost less than the original estimate,	<u>\$28,940 74</u>

(To be concluded.)

#### DAILY LABOURERS.

At a meeting of Merchants on the Schuylkill, at the Exchange on the 26th inst. it was

Resolved, That we pledge ourselves not to employ labourers to work by the day, on the Schuylkill, unless they will agree to work from sunrise to sunset, with an allowance of one hour to breakfast, and one hour to dinner, until the 1st of June; and from and after that date, one hour for breakfast and two hours for dinner, until the 1st of September; and that we will not give exceeding ONE DOLLAR per day for labourers.

And at an adjourned meeting, held this day, it was further

Resolved, That the offer made to the labourers on the Schuylkill, by the resolution passed yesterday, of allowing them two hours at dinner, from and after the 1st of June, is considered by the meeting as just and liberal; and that unless the terms offered be accepted by the labourers, and they return to duty at the respective yards, by to-morrow morning, then and in that

case, that all hands heretofore employed by us shall be discharged, and not again employed by either of us.

Resolved, That we pledge ourselves, to the utmost extent to protect those labourers in their persons and property from assault or violence, who do return to their work to-morrow morning, on the terms offered to them.

Resolved, That the resolution of the 26th inst. and the above proceedings to be published in hand-bills, and circulated on the Schuylkill, this afternoon, subscribed with the names of all the Trade.

Blight, Wallace & Co.	Smith & Roulton,
John White, President Delaware Coal Co.	Charles Humphreys & Co.
Jacob Serrill,	West, Hodgson & Co.
A. J. Bulton & Co.	S. S. Williams,
Neligh, Bull & Co.	J. W. Downing,
Johnson & Franklin,	G. B. Claxton,
T. M. Bryan President,	Alfred Lawton,
North American Co.	Bonsall & Rivoudt,
George C. Hale,	J. Blackston,
B. H. Springer,	J. S. Silver,
S. L. Bradford, Secretary	Sam'l B. Reeve & Co.
and Treasurer, Little	Joshua Bunting & Co.
Schuylkill Rail Road and	J. S. Keen,
Navigation Co.	Conrad Grove.

Philadelphia, May 27, 1835.

#### SOCIETY FOR THE RELIEF OF DISTRESSED SHIP MASTERS, &c.

Abstract of the accounts of "The Society for the Relief of Poor and Distressed Masters of Ships, their Widows and Children," being a summary of the receipts and payments, from the 30th of April, 1834, to the 30th April, 1835, as settled by a Committee of the Society, specially appointed for that purpose:—

CASH, DR.

To balance in the hands of the Treasurer,	
April, 30, 1834,	\$664 14
Quarterly payments and fines received,	109 80
Donations, by letters left in the Post Office,	46 10
Interest on City Loan,	196 00
Do State do	1,134 36
Dividends from the banks,	428 00
Do Turnpike road,	24 00
Subscriptions from new members,	135 00
Interest on the bequest of Stephen Girard,	585 00
Interest on bequest of Elizabeth Blair,	11 14
Do do James Kine,	53 50
Do on note with collateral security,	112 39
Dividend from the late Bank of the United States,	12 30
Principal of a note received,	1,633 00
	<u>\$5,149 73</u>

SUPPA, CR.

By Charities paid sundry persons,	\$2,626 72
Stock in bond and mortgage,	1,868 00
Balance in the hands of the Treasurer,	
viz: Charities,	532 19
Stock,	61 40
Contingent Fund,	41 42
	<u>\$5,149 73</u>

E. E. SAMUEL VOLANS, Treasurer.  
May, 1835.

From the Centre Democrat.

### DIED.

On the morning of the 20th inst. in this borough, (Bellefonte) in the 80th year of his age, ANDREW GREGG, Esq.

As Mr. Gregg was among the early settlers in Penns Valley; long a highly respectable inhabitant of this county, and for many years known as a public man in Pennsylvania, and in the United States, a brief account of his career is only a just tribute to worth.

ANDREW GREGG was born on the 10th of June, 1755, on his father's farm, about three miles northward of the then town of Carlisle, Cumberland county, Province of Pennsylvania. In early life he was sent to a Grammar school in that town, under the direction of the Rev. Mr. Steel; where he commenced his classical education.—Some time in the year 1772, he was entered as a student in the Academy of New Ark, in the then Province of Delaware, where he continued several years, and passed through a regular course of education, which was then considered among the best schools in the Middle Provinces. From New Ark Academy he went to Philadelphia, where he was engaged as a teacher of the languages for several years in the College, and also for several years in the University, when that institution went into operation in that city.

In the year 1783, Mr. Gregg having saved a few hundred dollars from his salary as a teacher, changed his situation and employment, and commenced business in the world as a storekeeper in Middletown, Dauphin county, in this State. In 1787 he married a daughter of Gen. Potter, then living near the West Branch of the Susquehanna, in Northumberland county, and at the earnest request of his father-in-law, in 1789 moved with his family to Penns Valley, where he settled down in the woods, began to build, improve, clear land, and commenced the business of farming, about two miles from *Potter's Old Fort*. On the place he first settled, he continued, improving his farm from year to year, pursuing with his own labor and great industry, the business of a country farmer. Here all his children were born and some of them married; and here he resided until the year 1814, when he came with his family to reside in this borough; having some years before purchased some property in this neighborhood.

In 1790 Mr. Gregg was elected a member of the House of Representatives of the second Congress under the present constitution of the United States; and by seven successive elections, for several districts, as they were arranged from time to time, including one by a general vote, or ticket over the whole state, was continued a member of that body sixteen successive years. And by the Legislature of his native state during the session of 1806—7, was chosen a member of the Senate of the U. States for six years. At the expiration of this term, on the 4th of March, 1813, he returned to private life.

One principal object of leaving his farm in 1814, and coming to reside in this borough, was a desire to be convenient to good schools for the benefit of his younger children. Here he lived a retired life, attending to the education of his children and the improvement of his farms, until December, 1820, when he was again called into notice by Gen. Hiester, then elected Governor of the State, requesting him to occupy the situation of Secretary of the Commonwealth. This call from Gov. Hiester, Mr. Gregg thought it was his duty to obey; and during the administration of Gov. Hiester, the duties of that office were executed by him with talents and integrity.

Mr. Gregg, as a public man, as well as in private life, was remarkable for a sound and discriminating mind; for his agreeable and dignified manners; his strict regard for truth; his unbending and unyielding honesty, made him highly respected, and respectable in every

situation, society, and circumstances, through which he was called to pass, during his long and useful life.—He was the affectionate husband, the indulgent and kind parent, the friendly and social neighbor.

### THE COAL TRADE.

The quantity of wood consumed in the New York market, in 1833, amounted to \$631,250; Coal, \$496,180—total \$1,127,430. In Philadelphia, in the same year, the quantity of wood consumed amounted to \$741,321; Coal, \$404,401—total, \$1,145,722. The annual consumption of coal in these cities already amounts to upwards of one hundred and fifty thousand tons—and as it is generally conceded that coal will in a few years almost entirely usurp the place of wood as a fuel, our readers may form an estimate of what the future consumption in the country will be, when we state that in less than three years, the consumption of Anthracite Coal in the cities of New York and Philadelphia alone, will be greater than the whole consumption in the United States was in 1832.—*Miners' Journal*.

### TAPPING PENNSYLVANIA.

We find the subjoined in the Pittsburgh Gazette.—The truth is, the New York people are frightened, and are climbing up to see what is going forward on our side of the hedge.

*"Improvements of the Allegheny River.*—We have had the pleasure within a few days past, of a long conference with Mr. James G. King, of New York, President of the New York and Erie Rail Road Company, and Mr. Samuel B. Ruggles, one of the Directors, and subsequently with Mr. P. G. Stuyvesant, another Director of the same company. From each of those gentlemen, we received the fullest and most satisfactory assurance that a large portion of the rail road will be placed under contract this fall, and that the work will be prosecuted with the utmost energy to completion.

We were, however, particularly gratified to learn that their attention was directed to the connection with the Allegheny, at Olean, or Warren, and that they were fully aware of the importance of the improvement of that river. We had noticed, for some time past, that the attention of the New Yorkers was turning towards that route, but had no expectation of finding them so fully informed in relation to that important river, and so ardently desirous of its improvement.

Finding them exceedingly anxious that some initiatory steps should be taken, in order to devise some plan of operation, it was suggested, after consultation with several friends in Pittsburgh who take an interest in the work, that a convention of delegates from the counties interested in that improvement, should be held at Kittanning, on Thursday, the 18th of June. The object of such a convention would be to collect all the information which is at present attainable, as to the character of the river, the best mode of improving it, the probable expense, and also, to decide whether application should be made to Congress or to the Legislature, and if to the latter, whether for the work to be done by the state, or for the incorporation of a company."

Printed every Saturday morning by WILLIAM F. GEDDES, No. 9 Library street.

The publication office of the Register has been removed from Franklin Place, to No. 61, in the Arcade, West Avenue, up stairs.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

**VOL. XV.--NO. 23.**

**PHILADELPHIA, JUNE 6, 1835.**

**No. 387.**

## REPORT OF SYLVESTER WELCH, ENGINEER.

(concluded from page 351.)

### *Rail way Superstructure.*

The stone blocks are all delivered upon the rail road, and nearly all down. The timber used in the foundation of the rail way upon the embankments, and upon other parts of the road where stone blocks could not be obtained without great expense, in consequence of the want of roads, is nearly all delivered and laid down.—The cast iron chairs, the greatest part of which have been made at the foundries at Blairsville and Frankstown, are delivered, with the exception of a few tons, upon the rail road. The plate rails for the inclined planes and the rail way along the basins and the road crossings, are all delivered. About two thousand and sixty tons of *edge rails* have been delivered on the road: They are all laid, except a part of those which have recently come to hand. There remains to make up the quantity required to complete the single track and the turn outs, one hundred and thirty-six tons; between forty-three and forty-four tons of these have been delivered in Philadelphia. They will be nearly or quite sufficient to make out the single track without the turn outs. If these rails are delivered without delay, the single track may be completed, so far that cars can pass over it, in two weeks; but the ballasting, &c. cannot be finished before the first of December. The time at which the turn outs can be completed, will depend entirely upon the delivery of the remainder of the rails; they can be laid in a few days after they arrive upon the rail road.

The cost of the stone blocks provided for the single track, turn outs, &c., amounts to	\$27,195 02½
The estimated cost of the timber for rails, &c. upon the inclined planes, and for that used for a foundation for the rail way upon embankments, &c. including turn outs, amounts to	46,872 06
The estimated cost of chairs, castings for turn outs, &c. made at the foundries at Blairsville and Frankstown, amount to	58,134 26
The estimated cost of edge rails, plate rails, pins and wedges for edge rails, nails and splicing plates for plate rails, and chairs manufactured in England,	192,644 00
The estimated cost of laying rail way superstructure, including all the labor required to complete the same, amounts, to	132,297 46½
	\$457,142 80½
Add for contingencies,	3,000 00
Estimated cost of rail way superstructure,	\$460,142 80½
Estimate reported Nov. 1st, 1832,	461,581 97

Making the present estimate less than the estimate of last year, \$1,439 16½

The cause of the difference between the original estimated cost of the rail way superstructure, and the estimate of Nov. 1st, 1832, was explained in my report to the Board, of which it formed a part.

The walls upon which the stationary engines and machinery are placed are completed. The sheds and houses for the protection of the engines and machinery at the head and foot of each inclined plane, are all nearly finished. The dwelling houses for the engine tender and hands, are in progress, some of them are finished or very nearly so, and the others will probably be completed before the setting in of winter.

The present estimated cost of walls, houses and sheds, for engines and machinery, dwelling houses for engine tender, &c. hanging small sheaves upon the plans, &c. is \$61,016 41

Estimated cost of stationary engines and machinery connected with them at the inclined planes, 66,912 31

Estimated cost of ropes for inclined planes including two extra ropes, and worming for all the ropes 20,314 81

Add for contingencies and incidental work 3,500 00

\$151,743 53

Estimated cost of engines and machinery, including houses and incidental work, \$107,650 00

Excess of cost over estimate of last year, \$44,093 53

When the estimates for steam engines and machinery were made last fall, no definite plan had been adopted.

The common price of engines in Pittsburg, of the power required, with an allowance for the expenses of transporting them to the inclined planes, was assumed as the cost of the engines.

The machinery then proposed, was such as would be adapted to an engine, with a single cylinder and fly wheel. When plans were presented for the consideration and adoption of the Canal Commissioners, they decided in favour of an engine with two cylinders and no fly wheel, and of machinery adapted to such an engine. Their decision coincided with my opinion, as I regarded the fly wheel as the principal cause of accidents upon inclined planes, worked by stationary engines. The expense of these engines, and the machinery connected with them, exceeds that of single cylinder engines and the machinery adapted to them, about twenty-five per cent.

The cast iron frames upon which the engines are placed, which have been substituted in lieu of frames of wood, and the water cylinder, for regulating the velocity of the descending cars, add considerably to the expenses of the engine and machinery. But they add also to the permanency of the engine, and the security of the descending cars.

The ropes provided for the inclined planes are of various lengths, from three thousand six hundred and six

teen, to six thousand six hundred and thirty-two feet, seven of them, including one extra rope, are each seven inches in circumference, and five including one extra rope, are each six and a fourth inches in circumference. The ropes are *shroud laid*; those of seven inches in circumference, contain each about four hundred and fifty yarns, and those of six and a fourth inches in circumference, contain about three hundred and sixty yarns.—Four of these ropes are made each in one piece; the others are made in pieces, and are to be spliced together. They are made, a part of them of Italian, and a part of Russian hemp.

The machinery for working the ropes is placed in a pit, under the rail way, at the head of the inclined plane. The cast iron sheaves or wheels, that give motion to the rope, are placed, the one 91½ feet, and the other 87½ feet from the head of the plane, or the point where the road begins to descend. These sheaves are 8 feet in diameter, at the bottom of the groove, and 8½ feet in diameter, at the extremity of the flanges; after they are cast they are put into a lathe, and the grooves turned out so as to fit the rope intended for each plane, and to give both sheaves the same diameter. These sheaves are placed vertically, and revolve in opposite directions. The end of the shaft of each sheave opposite the engine which works it, has a cog-wheel four feet in diameter, strongly secured upon it. The teeth of these wheels work into each other, and regulate the motion of the vertical sheaves. A cast iron sheave, nine feet seven inches in diameter, in the bottom of the groove, is fixed on a moveable carriage between the vertical wheels and the commencement of the descent of the plane. The groove in this sheave is also turned smooth and true, but it is longer than the rope. The moveable carriage may be drawn backwards and forwards about fifteen feet, but it is intended generally to be kept at the end of the pit nearest to the inclined plane by a weight connected with it by a chain. The weight is suspended in a well; the chain with which it is connected with the carriage passes over a small sheave at the top of the well, which allows it to ascend and descend as the carriage is drawn backward and forward. The short distance which this sheave and carriage is permitted to move, would not be a sufficient allowance for the contraction and expansion of the rope, but the sheave at the foot of the plane, around which the rope passes, is also placed in a carriage fixed upon ways, and can be moved backwards and forwards upwards of fifty feet. The ascending side of the rope passes over and around one of the vertical sheaves; then through an opening in the wall that separates the pits, and around the large horizontal sheave; then back through another opening in the wall, and under and around the other vertical sheave; then down the plane. The rope is pressed into a little more than one half of the groove of each vertical sheave. The groove at the bottom is a little smaller than the rope, so that when the rope is drawn into the groove, it is pressed by the sides and the bottom. The machinery is designed for two engines—one on each side of the rail road.

Each vertical sheave has a cast iron shaft eight inches in diameter, to the end of which, the crank by which the engine communicates motion to the machinery is affixed. A second crank is connected by a short shaft, with this, which works at right angles to it. The shafts of the vertical sheaves are in two parts, so that by removing a coupling box, which is moved backwards and forwards by a lever, the sheaves may move when the engine is at rest, or the engine may be put in motion when the sheaves are at rest.

The engines are of the high pressure kind; they have each two cylinders, the pistons of which work the cranks abovementioned.

Those for inclined planes No. 1, 3, 4, 6, 7, and 8, have cylinders of fourteen inches in diameter, and the stroke or distance which the piston moves, is five feet.

The engines for inclined planes No. 2, 5, 9 and 10,

have cylinders of thirteen inches in diameter, and the stroke or distance which the piston moves, is five feet. The number of revolutions required, to produce a velocity for the ascending cars of *four miles per hour*, will be about *fourteen*, and with this number, when the engine works under a pressure of steam of about seventy pounds to the inch. The power of the larger engines, computed in the common way, would be that of about thirty-five horses; and the power of the smaller ones, that of about thirty horses. But as the power of the engines depends upon the quantity of steam produced, and the degree to which it is heated, they might, by increasing the quantity and elastic power of the steam, be made to do the work of forty, fifty, or sixty horses each, without injury to the engines. This would produce a corresponding increase in the velocity of the ascending cars, or admit of an increase in the load. Each of the large engines have three cylindrical boilers, each thirty inches in diameter, and twenty feet long. Each of the smaller engines have three cylindrical boilers, thirty inches in diameter, and eighteen feet long—all the boilers are made of rolled iron, one fourth of an inch thick.

The engines have no fly wheel; the second cylinder, which works a crank at right angles to the main crank, and connected with it, supplies the place of a fly wheel, in regulating the motion of the machinery. With a fly wheel, if a car is thrown off the rail way, or if any derangement takes place with the rope that will cause it to stop, the machinery or the rope must break, before the fly wheel can be stopped; and when this takes place, all the cars upon the plane will run down, and be injured or entirely destroyed. Without the fly wheel, the rope is strong enough to stop the engine without danger of being broken.

Whenever the descending train of cars preponderates in weight, over the ascending train, sufficiently to overcome the resistance by friction of the machinery, rope, &c. or when there is no ascending train, the coupling boxes upon the shafts of the vertical wheels are thrown back, by which the engine is disengaged, and the sheaves and rope are put in motion, by the gravity of the descending load. The velocity of the descending train of cars, is regulated in the following manner. A cylinder fourteen inches in diameter and about six feet long, with a small air vessel upon each end, and a pipe upon one side, is placed upon a cast iron frame, secured to the walls, between the engine and the large sheaves. The cylinder is filled with water, and the piston which works in the same manner as the piston of a steam cylinder, and which is connected by gearing with the shafts of the vertical sheaves, drives the water backwards and forwards through the side pipe. In the centre of the side pipe, a sliding valve is fixed, by which the engine tender can regulate the size of the aperture through which the water must pass, and by this regulate the velocity of the cars. When the vertical or working sheaves are driven by the engine, the machinery connected with the water cylinder is disengaged from the other machinery by the aid of a clutch. When the inclined plane is used as a self acting plane, the train of cars are stopped, when they arrive at the head or foot of the plane by a friction wheel fixed upon the shaft, by which the water cylinder is worked. When the machinery is worked by the engine, the cars are stopped by letting steam into the end of the cylinder, towards which the piston is moving.

The rail way at Hollidaysburg, and at Conemaugh, (Johnstown) passes along parallel with the side of the basins, and distant from them one hundred feet. The space between the rail way and the basin is to be formed into slips and piers. The former will be eighty feet deep, or they will extend from the basin towards the rail way eighty feet, and thirty-one feet wide. The pier between every two slips will be about fifty-six feet wide, and will extend from the rail way to the basin.—A branch rail way is to be laid along the side of each

slip, on the pier. They will be connected with the main rail way by turning platforms. Two boats can load and unload in each slip, each one upon the pier along side of which it lies. The cars when receiving and discharging their load, will stand upon the branch rail ways, along side of the boats, and the load will be transferred from the cars to the boats, or visa versa, with the aid of cranes. Most of the piers owned by individuals will have ware houses upon them. The cranes can be so arranged, as to place loading from either cars or boats into the doors of the ware houses. Several of the slips both at Conemaugh and at Hollidaysburg, are already constructed, and two or three ware houses are built at each place.

At Conemaugh, the Commonwealth have at the end of the basin, and between it and the rail road, a piece of ground one hundred feet long. The pier and slips are constructed and ready for use, except the branch rail way, which is not yet laid down. The end of a street of the town lies along side of one of the slips, this is used as a landing place, which makes the ground occupied by the Commonwealth, equal in length to one hundred and fifty feet. At the other end of the basin, and between it and the rail road, there is appropriated to the use of the Commonwealth, a piece of ground two hundred feet in length, but no improvements have as yet been made upon it. At Hollidaysburg, there is of the ground between the basin and rail way, one hundred and fifty feet at one end, and two hundred feet at the other end, appropriated to the use of the Commonwealth.

The slip and piers authorized by the Board to be made upon the first mentioned of these lots, can be constructed while the water is out of the canal during the winter. No improvements have been authorized to be made upon the other.

The amount of tonnage that will be conveyed over the Portage rail road during the transporting season of 1834, from Hollidaysburg to Conemaugh, will probably exceed the amount that will be carried in the opposite direction. I have, however, no information in my possession from which an estimate that would approximate to truth, could be made of either.

As soon as this rail road is opened for public use, the cost of transporting merchandise from Philadelphia to Pittsburg, will probably be reduced to less than twenty dollars per ton; and the price of transporting produce from Pittsburg to Philadelphia will be reduced to twelve or thirteen dollars per ton.

The cost of transporting merchandize during the present season, from Hollidaysburg to Blairsville, a distance of about fifty-three miles, is from twelve to sixteen dollars per ton.

The expense of transporting merchandize by rail road and canal from Hollidaysburg to Blairsville, will not exceed four dollars per ton, and this sum includes a toll upon the rail road one half greater than that upon the canal. The inconvenience heretofore resulting from delay, will be entirely obviated; and the chances of injury by the weather to merchandize, will be greatly reduced, and will be far less than when transported in road wagons. There will also be a reduction in the time required for conveyance. If the Schuylkill and Union canals constitute a part of the line of communication, ten days is an ample allowance of time to carry a load from Philadelphia to Pittsburg; but if the Philadelphia and Columbia rail road is substituted, the time will be reduced to about eight or nine days—with the advantage of this reduction in expense and time, a considerable portion of the trade which now passes through other channels, will be transferred to the Pennsylvania canal. This change will probably be gradual, except so far as it relates to the turnpike roads through Pennsylvania.

From these the transportation will probably be transferred immediately to canals and rail roads.

The annual expense of the stationary engines at the

inclined planes, will be nearly the same, whether the number of tons carried over the rail road be fifty or one hundred thousand. The same number of men will be required in both cases to take care of the engine and machinery, and to manage the cars. The quantity of fuel consumed will not be more than one fourth greater to produce power for raising the larger quantity. — With the smaller quantity the fire must be constantly kept up, in order to be ready at all times to put the engine in motion. Ropes suffer more from exposure to the weather than from wear. The latter would be nearly in proportion to the number of tons transported. But a rope cannot be considered safe to work upon the inclined planes, more than one season, and it is believed that one will sustain the wear which takes place in the transit of one hundred thousand tons. When the trade increases to an amount equal to three or four hundred thousand tons per annum, then the expense for ropes, oil, and wear of machinery will be nearly in proportion to the number of tons transported.

The average expense of the engines, machinery, ropes, &c. at each inclined plane, for the ensuing season, will be as follows:

Coal, 60 bushels per day, 276 days—	
15,560 bushels, at 4 cents,	\$662 40
Oil at 25 cents per day, 276 days,	69 00
Engine tender, at \$1 50 per day, 265 days,	547 50
Two men at 75 cents per day, 276 days,	414 00
One man at 75 cents per day, 365 days,	273 75
Wear, &c. equal to one new rope, nine length,	1,600 00
	3,566 65
Add for incidental expenses,	600 00
	4,166 65
Number of inclined planes,	10
	\$41,666 50

If thirty thousand tons of merchandize, &c. be assumed as the amount to be carried westward; twenty thousand tons of produce, &c. as the amount to be carried eastward; the proportion of the load to the car to be as 6 to 2-3-10; and the number of working days 240, leaving thirty-six days of the time assumed for the season in which no labour will be done; then the number of pounds to be carried westward each day, including the weight of the cars, will be 345,833, equal 172½ tons of 2,000 pounds nearly; and the number to be carried eastward will be, including the cars, 262,500, or 131¼ tons of 2,000 pounds.

If the power of a horse, when travelling at the rate of three miles per hour, for six and two-thirds hours per day, or less, (this being his whole day's work) is assumed to be 112 pounds, then it will require, to convey the above amount of tonnage, at the rate of three miles per hour, over the levels between the inclined planes, and between these and the basins, 76 horses and 35 men. The horses are supposed to remain upon the levels where they are placed, and to make regular trips backwards and forwards, from one plane to the other, except on the level between planes No. 1 and 2, where their trips should be divided into distances of about 6½ miles.

The cost of men and horses, which would constitute the moving power upon the levels, would be as follows:

Thirty five men employed as drivers, &c.	
at 75 cents per day, 276 days,	\$72,244 50
Seventy-six horses employed to draw cars,	
at 50 cents per day, 276 days,	10,488 00
Cost of moving power upon levels,	\$18,732 50
Expense of stationary engines,	41,666 50

Expense of moving power to convey  
30,000 tons westward and 20,000 tons  
eastward, making 50,000 tons, 60,398 00

If the number of tons be doubled, or assumed to be  
100,000, the expense of moving power will be:

Engine and machinery, about \$42,000  
For men, horses, &c. upon levels, 37,463  
\$79,463

As soon as a double track is completed, locomotive engines ought to be substituted for horses, as the motive power, on three of the levels, viz: from Hollidaysburg to inclined plane No. 10, 3 74-100 miles, from inclined plane No. 2 to 1, 13 6-100 miles, and from inclined plane No. 1 to the basin at Conemaugh, 4 13-100 miles, making in all 20 93-100 miles. The other levels are short and better adapted to the use of horses than locomotive engines.

#### ESTIMATED COST OF THE PORTAGE RAIL ROAD.

##### *Grading and Work done under Contracts.*

For Grading,	472,162 59½	
Viaducts,	79,755 81	
Bridge,	3,327 44	
Culverts,	34,319 39½	
Cost of grading and masonry,		\$588,565 24
Cost of Stone blocks,	27,195 02½	
Timber,	46,872 06	
Chairs and other castings, American,	58,134 26	
Rails and other English iron,	192,644 00	
Laying rail way, &c.	132,297 46½	
Contingencies and incidental work,	3,000 00	

Estimated cost of rail way superstructure, 400,142 80½

Walls, houses, sheds, &c. for engines, 61,016 41

Stationary engines and machinery, 66,912 31

Ropes for inclined planes, including two extra ropes, 20,314 81

Contingencies and incidental work, 3,500 00

Estimated cost of engines, machinery, and houses and sheds connected with them, \$151,743 53

Estimated cost of single track, including double track on planes and at turn-outs, exclusive of office expenses and pay of officers, 1,200,451 57½

Estimated cost of second track, including a second set of engines for all the planes, 325,577 85

Estimated cost when completed with a double track, with two engines and the requisite machinery at each inclined plane, exclusive of office expenses and officer's pay, \$1,526,029 42½

The estimate made in November last of the cost of the first track of rail way superstructure, including the two tracks on the inclined planes, and at the turn-outs then proposed to be laid down, appears to correspond very nearly with the present estimate, which includes about three-fourths of a mile more of the second track than was included in the estimate of last year. This will reduce the length of the second track, yet to be

laid. But as an advance in the price of iron has taken place, no reduction is made in the estimate of last year, for this track. Five hundred dollars a piece is added to the estimated cost of the second set of engines.

The transportation, if so regulated, as to require cars to pass at fixed periods from one turnout to another, or to give some signal by sound or otherwise, when a train passes, one can be carried on next season, and perhaps the following one, without serious inconvenience. But when the trade increases to a large amount, the use of the single track will be exceedingly inconvenient, and would not in my opinion, be made to accommodate that which will pass over the rail road.

The second track would give facilities for transporting passengers, as well as merchandize and produce.— With the single track the necessary delays would render the road entirely unfit for the conveyance of passengers, and the time required to convey merchandize, &c. over the rail road would be at least one-third greater. The road being graded and the facilities of transportation very great, it will require not more than two or three months to lay it down, after the iron is delivered. Stone blocks, &c. can now be obtained with great facility, and might be procured before the iron arrives.

It will be necessary to employ a number of men upon the rail way, to keep it in repair after it is taken from the hands of the contractors. It will require a good deal of labour for a year or two, to keep the ditches clear, along the sides of hills where long slopes have been recently cut, and on embankments, which will probably settle considerably, the rail way must be raised and kept in order. Where stone blocks are laid, the road will require but little repair, except to keep the ditches clean, and this will be the case where the timber road is laid upon a solid foundation. The estimated amount required for making repairs, &c. on the rail road, exclusive of the expenses at the inclined planes mentioned above, will be \$14,500 00.

The annual expense of repairs after the next season, will probably be reduced below the above amount; the embankments will have become settled, and it will require less labor to keep the road in repair upon them, than in other places.

The arrangement of the engineer corps is the same as that of last year, viz: The line is divided equally between Messrs. W. Milnor Roberts, and Solomon W. Roberts, principal assistant engineers, the former assisted by James E. Day and Curtis Dixon, as sub-assistants, and Nathan M'Dowell, and J. Moyland Fox as targetmen; and the latter by Thomas Gorton and Thomas I. Power, as sub-assistants, and John Anderson and E. Ross Riddle as targetmen. There are eight chainmen and axemen.

The construction of the steam engines and machinery for the inclined planes, is superintended by Mr. Edward Miller, principal assistant engineer. Mr. Samuel Kennedy, sub-assistant engineer, is the only officer of the engineer corps employed upon the Western division of the canal.

I stated in my report of November 1st, 1832, that if the rails were delivered in Philadelphia in time to reach Huntingdon before the closing of the canal, a single track could be finished in July.

Information had been received, that nearly all the rails were manufactured, and that several cargoes had been shipped at Bristol, England, in September, for Philadelphia. Disasters at sea, and perhaps in some cases, improper management on the part of the agents of the importers, delayed their arrival.— The several cargoes of edge rails, were landed and delivered to the Commonwealth's agent, in Philadelphia, as follows:



<i>Names of vessels.</i>	<i>Date.</i>	<i>Tons.</i>			
Fame,	Oct. 25, 1832	217	14	2	26
Emerald,	Nov. 26, "	208	11	0	11
Allicia,	Jan. 19, 1833	373	3	3	19
Augusta,	Feb. 21, "	78	13	0	10
Omego,	March 29, "	292	8	0	27
Virginia,	April 26, "	263	3	1	4
Criterion,	" 27, "	149	17	0	20
Susan,	May 2, "	214	14	2	16
New Brunswick,	June 28, "	115	17	1	19
Delaware,	Aug. 28, "	65	11	2	10
Carroll of Carroll-					
ton,	Sept. 9, "	43	18	1	24
United States,	" 13, "	14	2	2	4
North Star,	" 13, "	23	2	3	11
Wm. Brown,	Oct. 25, "	43	3	1	0

In addition to the above, there is about 93 tons of edge rails not yet delivered in Philadelphia. It requires between two and three weeks, and sometimes longer, to deliver the iron on the road after it is received by the Commonwealth, when the canal is open and in good order.

The grading, if the rails had been ready to lay down, might have been finished in August. The expense, however, would have been increased, by the necessity of paying higher prices for two or three of the sections, as the contractors would have abandoned them, if they had been required to provide for a very large force.—The steam engines and machinery could not have been furnished and put up, by any effort of the contractors, before the last of October. But if the rail road had been laid down, the planes could have been worked by horse power, till the engines were ready for operation.

If the rails for the turn-outs do not arrive in season to be taken on to the rail road before the closing up of the canal, wood rails may be laid that will serve as a substitute for the iron rails, until the latter can be obtained. It is intended to put the ropes upon the inclined planes, as fast as the engines are prepared for running. Two of them are nearly ready, and the others are all being put up. It is desirable that the ropes may be used as much as possible this season, in order that they may be in a condition to be wormed during the winter.

If the canals do not close till late in December, iron, &c. to a considerable amount, may be carried over the rail road this fall.

All which is respectfully submitted.

SYLVESTER WELCH,  
*Engineer.*

November 1st, 1833.

### THE OLD MARKET.

At a large and respectable meeting of the citizens of Philadelphia, opposed to the wild and visionary scheme of destroying the market houses in Market street, for the purpose of making a rail road along the same, held at the Mansion House, corner of Eleventh and Market street, on Wednesday evening, May 27th, JACOB S. WALN, Esq. was appointed President, Lewis Taylor, and Joseph Lukens, Vice Presidents, and William H. Davis, Secretary.

The following preamble and resolutions were on motion, resolved,

Whereas, we congratulate our fellow citizens upon the great improvements made and now being made by the Commonwealth of Pennsylvania, as well as by the different companies recently incorporated by the Legislature of this State, by which means facilities will be afforded to all persons, in transporting goods to every section of our country; and we rejoice the more, that all these improvements have been, and are now being made, without any partial taxation and without infringing upon the rights of any citizen; and

Whereas, we perceive that efforts are now making to dispossess a portion of our fellow citizens from the enjoyment of the free and equal rights of the advantages to be gained by the improvements thus made, by taking from the laboring man, *who bares his share of taxation* for these improvements, and giving to the man of property all the benefits resulting therefrom, thus drawing a line of distinction, which we do most assuredly deprecate; we cannot see any just and solid reason why the citizen with his horse, cart, dray, wagon or barrow, should not participate in the benefits of these improvements, as well as the merchant, whose business and profits are increased in consequence thereof; and

Whereas, we have perceived a communication to Councils, signed by Thomas P. Cope, as Chairman, purporting to be a report of a committee appointed by the Select and Common Council, as well as a report of the minority of said committee, accompanied by a communication from W. Strickland, Esq. the object of which is to impress Councils with the necessity of laying a double track rail way along Market street to Third; from thence to the Delaware, destroying our market houses, (the pride of our city,) an innovation which we sincerely deprecate; for it cannot be presumed that rail roads can be so constructed as to traverse through every street, so that cars can be loaded and unloaded before every man's premises. Viewing the subject as connected with the vital interests of our city, as well as its citizens, we can see no possible reason why the citizens should be burdened with this immense expenditure, while there exists no inconvenience in the present location of the rail road in Broad street—on the other hand, great inconvenience, danger and evil effects, must be experienced in a rail road passing through our thickly populated streets—therefore

Resolved, That we heartily disapprove of the manner in which the committee of citizens was appointed, being taken from among men immediately interested in the project, and not from among practical and experienced men in the business.

Resolved, That we approve of the present location and termination of the rail road in Broad street, there being sufficient accommodations for all the rail road purposes, as well as abundance of vacant ground for the erection of depots.

Resolved, That in the present location of the rail road in Broad Street, we see the interest of the carter, drayman and porter blended with that of the opulent merchant and the enterprising mechanic—whilst the merchant is making sales of his merchandize, the others convey it to the depots, and the mechanic by the improvements made in the western part of our city.

Resolved, That inasmuch as our city is now immensely in debt, we cannot see the propriety of increasing the same to the extent of a million and a half of dollars to satisfy the avarice of a few individuals owning property in the eastern part of the city.

Resolved, That the efforts now making to induce Councils to destroy our market houses, would be attended with great inconvenience to our citizens, and prove a serious innovation upon the rights of the farmer and others attending our market.

Resolved, That in the opinion of practical and experienced men, rail roads have a tendency to depreciate the value of property on its route, while it increases it at its termination. Vide the report of the minority and opinion of Wm. Strickland, Esq.

Resolved, That the pittance to be gained from the portage of goods to Broad street is but a secondary consideration, compared to the danger of having a rail road through our streets.

Resolved, That copies of the foregoing preamble and resolutions, signed by the officers of this meeting, be laid before the Select and Common Council, with a request that they submit the further consideration of the

subject to a vote of the citizens at the next October election.

On motion, Resolved, That in consequence of the crowded state of the room, a committee of ten be appointed to make arrangements preparatory to the calling of a general town meeting of the citizens of Philadelphia, opposed to the removal of the market houses on Market street, and a rail road down the same, to be held in Independence Square, on Wednesday afternoon, June 3d, at 5 o'clock.

On motion, Resolved, That the communication received from a *Silent Observer*, be published.

Resolved, That the proceedings of this meeting be published in the daily papers of the city.

JACOB S. WALN, President.

LEWIS TAYLOR, } Vice Presidents.  
JOS. LUKENS, }

Wm. H. Davis, Secretary.

*To the Chairman of the meeting of Citizens, opposed to the removal of the Market Houses from High Street.*

Sir:—As it is out of my power to attend the meeting this evening, I consider it is my duty to forward a sketch of my views to you on this momentous subject. I am not accustomed to take any part or active interest in the various public meetings which assemble from time to time, to discuss the expediency or inexpediency of public measures: but I cannot remain indifferent when measures are contemplated which cannot be deemed less than moral treason against the many for the benefit of a comparatively small number, for the following reasons:—

1st.—The Philadelphia Market is the boast of the world, and for general convenience is unsurpassed, which results mainly from the market forming one continuous line in the middle of the city, and equally convenient of access by those residing north or south of it, and from its great extent east and west, equally near to the inhabitants of the eastern or western portions of the city. From the great extent of the market results the unlimited assortment so easily accessible by the citizens at large, who when in the market have only to travel a short distance east or west to obtain all that heart can wish. Scatter these markets, and all these advantages are lost. Competition among the sellers of produce will be destroyed in a great measure, and we shall have to pay higher prices for inferior articles.—The markets will be reduced to huckster shops, and while one market may contain a superabundance of one article it will probably be ill supplied with many more; consequently the citizens will be obliged to take what they can get, or travel from one extremity of the city to the other, and for their pains pay 25 per cent. more for their marketing than they now do.

2d.—The projected change will not afford the desired facilities for trade that its advocates wish to secure. In twenty years we may calculate that the trade of this city will be doubled, and Market street will not have room in its whole extent to transact the business required; then some other wild scheme must be resorted to (equally expensive) or the traders will be driven to do then, what they ought to do forthwith, viz:—to remove their stores into Broad street, where the rail road is already constructed, which street is unlimited in its extent and every way better calculated for an immense wholesale business than Market street, and far preferable so far as concerns the vast and increasing trade of the Schuylkill and the interior.

3d.—The projected scheme, if carried into effect will put a stop to the improvements in the western part of the city, and probably retard them longer than can now be anticipated, which must rapidly improve if trade is allowed to take its proper and natural course along Broad street, thereby distributing the various kinds of business throughout the city instead of confining it to particular sections.

4th.—It is unjust to tax the many for the benefit of the few, especially when those who are to be benefited are the very persons who are best able to bear the burden, (owners of real estate and wholesale traders.) The measure is unjust and oppressive because the majority of property holders will not be benefited by it. It is oppressive because the poor in common with the rich, will have to pay more for produce, with a diminished assortment, and greater consumption of time in procuring it.

5th.—If the burden must be borne, it would be better for Councils to make an estimate of the cost of pulling down the markets, purchasing ground and erecting new ones, &c. and spending the whole sum in erecting stores in Broad street, for the accommodation of trade, or by raising markets in High street, high enough to allow of a rail road to pass under them.

I may observe that I am not a holder of real estate, and have no special interests at stake. I had intended to transcribe this, but the hour of meeting having arrived, I must send it as it is, or fail to do my duty when such an important interest is at stake.

P. S.—Have not the farmers a right to sell produce in High street, that cannot be taken away from them?

"A SILENT OBSERVER."

### THE ALLEGHENY ARSENAL.

Pennsylvania can boast of having within her Territories one of the finest arsenals in the Union; probably for neatness and symmetrical arrangement, the handsomest in the world, I mean that extensive military establishment recently named after the beautiful river 'Allegheny,' and more extensively known as the United States Arsenal near Pittsburgh. This ordnance depot occupies a plot of ground containing thirty-one acres one rod thirty-three perches, and one hundred and thirty-two feet from the river above mentioned, to the Philadelphia turnpike road, and entirely surrounded by a handsome, well built wall. The order in which the ground is divided is as follows:

1st. The lower park, comprising a military store, built of free stone, three stories high, two carriage houses and three timber sheds, with brick pilasters; a river wall of massive stone, containing one thousand seven hundred and twenty perches.

2d. The arsenal yard, a square with the following buildings: The main arsenal or magazine of arms, three stories, with a pediment or tower one hundred and twenty feet by forty; upon the second floor the arms are arranged in racks, and present to the 'coup d'œil militaire' a splendid sight, it is in fact a military museum. Here are deposited the relics of former time; revolutionary trophies, taken at Saratoga, Yorktown, and St. John, present themselves at the entrance, and remind the visitor of Washington, Lafayette, Gates, and other worthies of past days. At the end of the room may be seen a little mortar, with the marks of U. S. Philadelphia, 1793, an intimate friend of 'old Mad Anthony' and a most destructive enemy to the aborigines. The total number of small arms fall not short of seventy-seven thousand. The other buildings are: Officers' quarters, barracks; armory, smithery, carriage shop, machine shop with an engine of twelve horse power, paint shops, lead and brass foundries, tin shop, accoutrement shop and officers. The last named buildings are of brick, with shingle roofs. The yard, with its gravel pathways and locust trees, is not unlike the garden of the Tuileries in miniature. In the centre is a cistern or reservoir, intended with the fire engine, to convey water to any part of the fabric.

3d. The front park presents in view the outside of the main arsenal, with the right and left wings of the commandant's and subalterns' quarters, and is chiefly designed as a grove, to add to the appearance of the 'tout ensemble.' This park is enclosed with iron railings, similar to those around or in front of the Presi-

dent's House, at Washington. After crossing the Butler road, it leads us, 4th, into the upper park, surrounded, likewise, with a permanent wall of stone. In its inclosure are the public stables, (of brick,) three small frame buildings, separated about eighty yards from each other, denominated as the composition, drawing, and preparation rooms, are seen from the road. About two hundred yards in the rear of these buildings is the magazine of powder, designed to contain (environs) one thousand three hundred barrels. The topographical scenery is not surpassed by any west of the Allegheny Mountains, and the climate is salubrious and fruitful.

The Allegheny Arsenal was commenced in 1814. The site selected and the greater part of the works erected by Majors Woolly and Wade, late of the army. The remainder of the improvements, filling up an extensive ravine, building timber sheds, &c., erecting walls, &c., were finished under the superintendence of the senior captain of the present ordnance corps.

There are at present stationed at this post one Brevet Major, two Lieutenants, one storekeeper, thirty-five enlisted ordnance men, and fourteen citizens employed as mechanics. As an arsenal of the first class, the situation of the country offers every facility, both as regards the commodities and the mechanical operations; and there is not probably a site which would present more favorable results as an ordnance depot, than the one so judiciously selected by the gentlemen whose names are above quoted.—*Military and Naval Magazine for May, 1835.*

#### LETTERS ON THE PENNSYLVANIA SYSTEM OF SOLITARY IMPRISONMENT.

To Mr. Samuel Wood.

January, 1854.

My dear Sir,—I am induced from a knowledge of your goodness and readiness to impart all the useful information you possess on the subject of the Prison system, to put your patience to the trial, by requesting you to furnish me with a more circumstantial account than I have been able to collect from various Publications of the result of the experiment which has been made on the system of solitary confinement in your State.

Pennsylvania has had the honour of first introducing a practical exemplification of the great Howard's Plan, but on an improved scale. The benevolent efforts made by some of her estimable sons to reform her penal code and Prison Discipline, I trust will be attended with the success they merit, and I sincerely hope they will gain a signal triumph over the errors and prejudices of the enemies of the system, and prove how unfounded have been their predictions of its failure. Monarchs and military heroes claim for themselves immortal honour in having achieved the conquest of a Territory or a Fortress at the expense of much treasure, and the sacrifice of many thousand lives; their fame is estimated by the quantity of human blood, which is shed in accomplishing their ambitious projects; far otherwise with the country of Penn, her ambition is of a purer and more exalted character; she aims at a more glorious object, a triumph over vice, and by applying the mild precepts of the Christian religion towards perfecting her Institutions, to lay the foundation of future greatness and prosperity. What can be more gratifying to the virtuous mind of man than a consciousness in having succeeded in soothing the sorrows of the afflicted and rescuing the convict from ignominy, and restoring him to the world as a reformed and useful member of the community.

Your experience, well known humanity, and practical knowledge of the system of solitary confinement, give you a strong claim to the gratitude and confidence of your fellow citizens, and must fully qualify you to add to the stock of valuable information already com-

municated by Mr. Vaux, Mr. Livingston, Dr. Hache, Mr. Sergeant, and other gentlemen. I remember with infinite satisfaction the opportunity which was politely afforded me of visiting the State Prison, under your immediate guardianship. It is with great pleasure I can bear testimony of the admirable management adopted in every Department of that Institution. Its healthy and elevated site. Its beautiful architectural proportions; the rigid attention paid to the means of preserving the health of the Prisoners, by cleanliness, ventilation, pure water, and wholesome diet constitute it in my opinion the best regulated and most complete establishment in the world. The favourable impression made on my mind in viewing this splendid edifice can never be effaced, and I wish most ardently that the example of Pennsylvania may be followed by every State of the Union, in adopting the plan of solitary imprisonment, and manual labour. The advantages to be derived from it are of such importance that none but the most prejudiced and fastidious can take exception to it. In awarding justice, we have nothing to fear from gentlemen of honor and science, as it is to be presumed their opinions would be founded on correct principles. From men of impartial and liberal sentiments we have a right to expect a fair and candid decision, but from the capricious and capious who too often view every object through the most jaundiced and distorted vision we look for nothing but vulgar and glaring misrepresentations.

I have recently read with great interest and satisfaction, the work of Messieurs De Beaumont and De Tocqueville "on the Penitentiary system in the United States." These gentlemen have done justice to the subject, and their pages are divested of those illiberal and erroneous remarks which so often disgrace modern travellers. You have no doubt perused with attention their useful Book, and must admit the correctness of this observation "that in the Philadelphia Penitentiary, the moral situation in which the convicts are placed is eminently calculated to facilitate their regeneration." We must also fully concur in the truth of the following remarks: "Such is the fatal influence of the wicked upon each other, that one finished rogue in a prison suffices as a model for all who see and hear him to fashion their vices and immorality upon his. It is evident that all moral contagion among the imprisoned, is impossible, where thick walls separate the Prisoners day and night. The new Penitentiaries in which this contagious influence is avoided, have therefore gained a signal advantage; and as long as that prison has not yet been found whose discipline is completely regenerating in its effects, perhaps we may be permitted to say that the best Prison is that which does not corrupt." I was greatly surprised to find it stated by the authors of this work that they saw two Insane convicts in the Prison. I should suppose they must have been admitted in that state while laboring under temporary derangement. Much has been written on the subject of Penal Jurisprudence, and various are the opinions as to the best and most effectual mode of diminishing crime, and reforming the criminal. Some writers are advocates of the Auburn system of discipline, others are in favor of the penal code of England, which too often hurries the wretched convict into eternity for offences which are not of sufficient magnitude and enormity to justify the ignominious punishment of death by the gallows. You may remember to have read among the works of Dr. Franklin, some very sensible remarks and severe strictures on the English criminal Laws, in a letter addressed to Benjamin H. Vaughan, Esq. dated March 14, 1785—that great and good man has declared in the most positive terms his abhorrence of the rigour of those Laws, and expresses his opinion, "that in all cases, on the eternal principle of justice and equity, punishments should be proportioned to offences."

I cannot conceive that a more judicious and efficient mode of punishment could be adopted than solitary im-

prisonment on the Pennsylvania plan. I am aware of the attempts which have been made to attach odium to it; perfect unanimity of opinion, however, is seldom to be expected, and men are too easily led astray by prejudice, ignorance, and caprice—without experiment and research, truth cannot be fairly developed, and the more narrowly we investigate, the nearer we approach to it. In the figurative language of a respectable writer "The Sun illuminates the Hills, whilst it is below the horizon, and truth is discovered by the highest minds only, a little before it becomes manifest to the multitude;" thus, men of great intellectual worth are enabled by well directed efforts to propagate doctrines which have a tendency to enlighten and improve the mind, and by gradual and certain progress to reform and benefit the human race. We are told that Bias, one of the Sages of Greece regarded the greater part of mankind as bad, but admitting that only a fourth are so, it must not then surprise us if prisons are increased in large and populous cities, where crime is constantly accumulating with luxury, and misery appears in all its horrors.

If criminals are not radically vicious, and are not so depraved as to be beyond the control of the Law, it must therefore be reasonable to suppose that of all the modes of punishment which have hitherto been tried, solitary confinement promises to be most conducive to the moral welfare of the prisoner, and the good of the State. It is much to be regretted that the great and distinguished name of Roscoe\* has been found among the enemies of this system, the real merits of which could be little understood when it was denounced as cruel and tyrannical, and compared to the Bastille.

The Pennsylvania system has been founded in a spirit of philanthropy and justice,—whereas the Bastille was instituted by an act of tyranny, and the voice of a tyrant could command an innocent subject to be incarcerated within the walls of a gloomy dungeon, without a trial, and with no other process than a *Lettre de cachet*, and because "*Le Roile veut*" (the King wills it) I thank God, that for the honor of mankind, and the cause of humanity, this monument of Despotism has long since ceased to disgrace the French nation.

No fetters and whips, or other instruments of torture are tolerated within the walls of the Eastern State Prison. Justice is here tempered by mercy, and the prisoner has full time to reflect on his past misdeeds, and to repent of having offended the laws of God and his country. The irksomeness of his confinement is greatly relieved by mechanical occupation, and his mind is solaced by the Bible and Prayer Book, whilst he finds additional consolation in the occasional visits from a minister of the Gospel, the learned and amiable Physician of the Institution, and has in you a friend and guardian; for who is so well qualified to take special charge of this Institution as a member of the Society of Friends, whose religion proclaims peace, charity, and good will to all mankind. The opportunities you have enjoyed in visiting and inspecting the condition of the Prisons of Europe and the United States, must render you competent to form a correct opinion on the various methods of managing and enforcing Prison Discipline, and have enabled you to observe the striking contrast which the Pennsylvania system presents to those Gaols, where the brutal punishment of the lash is frequently inflicted for every petty offence, where the young and inexperienced in crime are associated with the most abandoned malefactors, and obliged by their deplorable situation to listen to the fiendish recital of their

atrocious acts of rapine and murder, to their boisterous mirth and vulgar jests, or be subjected to the ferocious looks and unbridled fury of such monsters, amidst the clanking of chains, the imprecations, and licentious jargon of the most unrelenting villains. The advantages of solitary imprisonment are obvious, and the happy influence exercised by it over the mind of the convict, cannot be too highly appreciated, and it yet remains for you to ascertain how much it can be improved, and to what extent it may be successfully carried. Permit me before I close this communication (already too prolix) to remark, that in this enlightened age, when the march of intellect is making such rapid strides to ameliorate the moral state of mind; to forward the views of philanthropic Statesmen, and men of science, the criminal laws of those countries which declare such crimes capital, and punishable with death, as do not here admit of punishment by solitary imprisonment for a longer period than four or five years, are a violation of the established principles of humanity, and at variance with the doctrines of Christianity. Many of the zealous champions of the English Penal Law contend that prevention is the great end of punishment; but conflicting as are the opinions on this subject, let us lay it down as a maxim, that he who advocates the cause of mercy takes the safe side of the question, provided he does not trample upon and infringe the great precepts of the Christian Religion. There are it is true, certain crimes although not producing death, yet so heinous as to warrant the most severe punishment the Law can inflict. The great objection to the penal Law of England is that it makes no difference between the felon who commits murder and the criminal who steals a sheep. An eminent English writer who thinks the Criminal Law of England faulty, and condemns it for undue severity, maintains, "that offences are punished not according to the moral guilt which they indicate in the offender, but according to the facility with which they can be committed and to their supposed danger in consequence to the community."

To the list of great names of writers who are decidedly in favor of solitary imprisonment, may be added the learned Dr. Paley, who has remarked that "of the reforming punishments which have not yet been tried; none promise so much success as that of solitary imprisonment, or the confinement of prisoners in separate apartments. This improvement augments the terror of the punishment, secludes the criminal from the society of his fellow prisoners, in which society the worse are sure to corrupt the better; weans him from the knowledge of his companions, and from the love of that turbulent, precarious life in which his vices had engaged him, is calculated to raise up in him reflections on the folly of his choice, and to dispose his mind to such bitter and continued penitence as may produce a lasting alteration on the principles of his conduct."

I have for the present sufficiently trespassed on your time, and have only to say that I heartily wish success to the great cause of Justice and Humanity in which Pennsylvania has embarked; her conduct is truly meritorious, and her example will, I hope, be followed by every State in the Union. I will shortly have the satisfaction of communicating to you the opinion of an eminent Judge of this State, who is an accomplished scholar, and a gentleman in whose judgment I have perfect reliance; indeed, we cannot be too solicitous in seeking for information from the highest authority, and the best informed men, on every subject connected with the welfare of an enlightened people, and particularly when we confide in their opinions to elicit truth; and under such circumstances, I consider it is a duty they owe to their country, and to the cause of Philanthropy not to withhold them.

I am, Dear Sir, with sentiments of great respect and regard, your's sincerely,

PHILIP TIDYMAN.

\*In justice to the memory of Mr. Roscoe, I have good reason to believe, that some months prior to his decease, his opinions underwent a great change; and he thought more favorably of the Pennsylvania System, when he learnt that manual labour was required, and opportunities granted to the prisoner, for mental improvement.

## EASTERN PENITENTIARY,

PHILADELPHIA, 9 Month 26th, 1834.

Esteemed Friend,—I have to acknowledge the receipt of thy two communications, which would have been sooner replied to, but for the numerous calls on my time, and I am sure thy goodness will excuse the delay.

The favorable opinion thou hast so kindly and ably expressed respecting our Penitentiary, and the firm conviction anticipated of its happy result, will I have no doubt, be fully realized to the entire satisfaction of all the advocates of the system. Thus far we have every cause for congratulation, and many of those who were decidedly, and I believe conscientiously opposed to the theory of solitary confinement, have after a careful and impartial examination of the system as practised by us, become thorough converts and warm advocates. It must however be admitted that some of these, as well as most of the opponents of the system, have not had a distinct understanding of it.—They supposed that the prisoner was immured in a small and perhaps dark cell, without books or employment; never seeing the face of man, and rarely hearing his voice,—hence they have said it was “cruel in the extreme, and should not be tolerated.” But when some of these very persons have seen the spaciousness of the cells, the attention paid to their construction, to the ventilation, heating and facilities to cleanse them—when they have seen the men cheerfully engaged in their various employments, seen them with their books, and know that they are seen by the keepers and official visitors, that they receive both religious and mechanical instruction, that the system cannot be called solitary, but is perfectly separate confinement, with religious, moral, and mechanical instruction;—these very opponents cry out “we did not understand you, and we now fear that instead of being *too severe*, your system is *too lenient*.” I do not think we can be understood without being seen, and I do rejoice that some distinguished men like thyself, have taken the trouble to come, see and know for yourselves. I have sometimes thought that in speaking of the discipline of the Institution, we might say that we discard the word punishment and substitute that of privation. Thus, if a man steal from his fellow man, he is not fit to run at large and is therefore locked up, deprived of society, and many of the luxuries of life. If he conducts himself with propriety, he is comfortable, fed, clothed and allowed to walk in a yard once a day. He is expected to work and earn his living, as this is the duty of all, if he neglects to do this, (unless sick) he is fed accordingly; if he abuses the privilege of his yard, he is not suffered to go into it, if he behaves refractory, he is put into a less comfortable cell, and his diet reduced until he is in a better state of mind; but stripes and chains are entirely discarded, and very little trouble is found in the management of prisoners. The two most important objects of improvement are the security of society and the reformation of the criminal. The latter had ceased to be hoped for under the old prison regulations, (if regulations they could be called) and all acquainted with the subject agreed, that what had been intended for, and called Penitentiaries, produced more crimes than they eradicated, and the only beneficial effect was, that the inmates were prevented from committing depredations on society during their confinement. But it is doubtful whether even in this respect there was any advantage, and whether it would not be as well to dispense with imprisonment rather than herd them together where the hardened and accomplished villain was constantly teaching the novice, and thus creating an extensive community of thieves.—Attempts were early made in Pennsylvania to remedy this evil, but from circumstances (not necessary to mention in this letter) were never carried into full operation. The neighboring State of New York experient

ing this evil to a great extent, altered their State Prison at Auburn so as to give each convict a separate cell to sleep in, and established a strict and severe discipline during the day, so as to cut off much of the communication which had before existed between the prisoners. The Legislature were so much pleased with this, that a new prison was built at Sing Sing. While this was going on in New York, Pennsylvania satisfied with the efficacy of their former plans, directed the building of a Prison at Pittsburg, and one at Philadelphia, for separate confinement both day and night. No difference of opinion exists as to the evil effects of the old mode of allowing all to be together, but the question appears to be, whether it is best to allow prisoners to be worked together in the day, and lodged separate at night, or kept separate both day and night, and deprived of all opportunity of seeing or knowing each other. This subject is ably argued in a pamphlet written by G. W. Smith, Esq. of this city, entitled, a Defence of the System of Solitary Confinement, &c. which contains more information on the subject of prisons and prison discipline, than any work of its size that I have seen. At the time this was written, we had not the full advantage of experience,—now after having had five years of actual practice, we find that all we promised has been realized, and none of those horrible results predicted by those opposed to us, have occurred.—We find that separate confinement with labour, does not cause either insanity or disease; we have now prisoners who have spent *four* and one nearly *five* years with us, who to all appearance are in as good health as the day they came in, and as respects their minds they have evidently much improved. It must be admitted that where they labour in workshops together, there is a greater choice of trades, and hence more profit will accrue to the Institution; this I consider of minor importance; it is desirable that the prisoner should be made to support himself, this is all I deem necessary. No State should promote crime, to increase its revenues, and I cannot but believe that where prisoners are allowed to associate at all and see each other, they become acquainted with the persons of each other, and although but little oral communication may take place, crime is the necessary result.

Wherever prisoners are allowed to come together, they will know each other and they will communicate together; in order to prevent this, corporal punishment is resorted to, and in exact proportion as it is prevented, is the severity of the whipping. Now this practice I must enter my protest against. From the long and perhaps I may be allowed to say, the extensive knowledge I have had of the various systems in the practice both in Europe and America, the pains I have taken to investigate the effect and results of their discipline, have fully convinced me, that the cruel practice of whipping is a serious and lasting injury; it degrades the individual still lower in his own estimation, it hardens his heart, renders him callous and dead to all the kind and better feelings of our nature and should he survive the cruel treatment (which I fear is too often inflicted) and be restored again to liberty, he comes upon society with his feelings embittered against mankind, his mind bent on revenge, and ready at the first opportunity to plunge again into crime—thus the second state of this man is worse than the first. I cannot approve of any system, the success of which depends on violence or the lash, nor do I think it will ever be permitted in Pennsylvania. If separate sleeping cells at night, strict discipline during the day, kept up by the fear of the whip has a salutary effect—I would ask have we not all the advantages where this separation is both day and night, and where there is no necessity for this severity to preserve the discipline of the establishment. To the Philanthropist I would say come, view, examine for yourself,—let the opposers of the Institution cast aside all prejudice, and give it an impartial investigation; let them behold the prisoners, view

them at their various employments, their health, their cheerfulness, their mild demeanor, their ready acquiescence in all orders given, and the apparent pleasure with which they are obeyed,—it will then be asked how is all this accomplished? I answer by separate confinement, by a uniform, kind and judicious treatment, by a regular course of labour, proper exercise, by the perusal of the Bible, and various religious books, and by what instruction it is in our power to give. We look upon them as men, (not as brutes,) as a part of the great human family with ourselves, and we consider it a duty incumbent upon us to use mild and persuasive measures, and endeavour by precepts of virtue, morality, and religion, to wean them from their vicious course, bring them to a deep and full sense of their guilt, and the consequent degradation and misery ever attendant upon crime. We need no lash nor chains, no threats or violence to enforce our rules and regulations, we pursue a merciful, but a firm and determined course. That all who are thus disciplined will go out and become good citizens, would be almost a miracle; but even upon some old and hardened offenders, a radical change has been effected, and their good and industrious conduct since their discharge, has satisfied us that if they have not been reformed, they have at least been benefited. My hopes and expectations have been more immediately directed to the young in crime; those who are not by profession thieves, but who have been led into crime by neglect, misfortune or chance, or who have just commenced the career in crime, who are not acquainted with other rogues, and who do not belong to the community of thieves. These form no small portion among criminals, and it is on these that I humbly, but most confidently trust our Institution will confer a lasting blessing; I look forward with hope and confidence, which the result has so far fully sustained, that the majority will "cease to do evil and learn to do well," and become useful and honorable members of society.

I send a set of Reports made to the Legislature from the opening of the Penitentiary to the first of this year, these contain information on several subjects referred to in thy letters, and the tables will give all the statistical information requested; my own Reports contain opinions which I would otherwise here have to reiterate. In reply as to thy inquiries, as to the moral condition of the colored convict as compared to the white, I may say it is inferior, but a few have had advantages of school learning, and the care of masters when young, while most have been hired out from early youth, without any pains having been taken to instill into them principles of morality or religion. Very few are convicted of high crimes except for Burglary; but these cases are generally without violence, their propensity appears to be, to pilfer and to steal. They work full as well as our white prisoners and readily receive instruction, and very few have shewn a refractory disposition, three or four out of the whole number received have been slaves, and two of these excellent prisoners.

Our diet consists of one pound of good bread and a pint of coffee or cocoa for breakfast, three quarters of a pound of beef without bone, one pint of soup and as many potatoes as they wish for dinner; we occasionally give instead of beef half a pound of pork, and at some seasons rice instead of potatoes; for supper Indian mush as much as they please, and they get once a month half a gallon of molasses, which is used at discretion, salt is also given to them. Each cell has water introduced into it which the inmates can draw at pleasure. The ground floor of our observatory, being about on a level with the top of the reservoir at Fair Mount (96 feet above high water) we find with regret that we cannot have sufficient supply of water from that source, and therefore have decided on having the necessary water works within our walls. Notwithstanding our elevated site, we find water at 12 feet below the surface; we have just completed a well 30 feet diameter and 26 feet deep,

in which we shall have 12 or 14 feet depth of water.—We have also in process a reservoir 40 feet diameter built above the level of our cells, which is calculated to hold one weeks supply for the whole establishment. I mention these facts to show that where there are not the advantages of a public water works, the necessary supply may be obtained within the walls.

With sentiments of great esteem and respect,  
I remain thy sincere friend,

SAMUEL R. WOOD.

Dr. Philip Tidyman, Charleston, S. C.

From the Lancaster Journal

#### THE MARIETTA BRANCH RAIL WAY,

Forming a connection with the Columbia and Philadelphia rail way, at the depot near Columbia. The interesting report of the Chief Engineer, Mr. Gay, upon this important connection with the Susquehanna, at the Borough of Marietta, is published in this day's paper. By this project, the inclined plane at Columbia is entirely avoided, and one of the most favorable and beautiful points upon the great river, will be opened for an extensive river and inland trade. There can be no doubt of the success of the undertaking.

#### REPORT OF EDWARD F. GAY, ESQ. CIVIL ENGINEER,

##### To the Commissioners of the Marietta Rail Way:

Gentlemen—Having been desired by you "to make the necessary examinations, for a line of rail way from the borough of Marietta, to the nearest practicable point of connection with the Pennsylvania rail way, East of the Columbia inclined plane," I now submit to you the result of my labours, embraced in the following report and estimate, together with a map representing the position of the line with reference to the State Improvements, as completed.

Commencing at the East line of the borough of Marietta, the route of the rail way is traced nearly parallel with the Columbia and Marietta turnpike, to station No. 56, being fifteen chains south of 'Spinning Wheel Point,' thence bears eastwardly, and crossing Bethel's Run, passes through the northern limits of the borough of Columbia, and after crossing Shawnee Run, it intersects the Pennsylvania rail way near to the Lancaster and Columbia Turnpike, and distant about 20 chains East of the 'Locomotive Depot,' at the head of the inclined plane. The whole length of the line, as measured, is three miles and sixty nine chains.

From station No. 85, on the dividing ridge, between Bethel's and Shawnee Runs, a line was traced Northwardly, near the dwelling of Mr. S. Heiss, and connected with the Pennsylvania rail way, about half a mile east of the point proposed, as represented on the map, but as this route was found to possess no advantages over the other, it was abandoned.

By reference to the map, it will be seen that the proposed route, as laid down, is remarkably direct in its general course, and if viewed in connection with the character of the intervening country, affords the shortest possible, and I may add, practicable line, for a rail way between Marietta and the Pennsylvania rail way, by which the inclined plane can be avoided.

The character of the line is distinctly and naturally marked into three divisions. The first extending from Marietta to Chiques creek; second, from Chiques to station No. 56 fifteen chains south of 'Spinning Wheel Point,' and third, from station No. 56, to the Pennsylvania rail way.

The first division is remarkably favorable for the construction of the rail way, the excavation will be light, and the expense comparatively trifling. As the line crosses the Chiques creek, at the pool of Henry Halde-man's Mill dam, a bridge of 383 feet in length will be

required at that place, also, a small bridge over the saw mill head-race.

The second division, commencing at Chicques creek, is traced along the precipitous face of 'Chicques hill,' and in its course encounters several heavy rock-cuts and embankments. Materials for the embankments, will in some places, be difficult to obtain, as a large portion of the natural soil which originally covered the rocky face of the hill, has been removed, to form the canal and turnpike, which are constructed along its base. The most prominent rock-cuts, which occur on this division, are through, what are commonly known as 'Chicques Rocks,' and 'Spinning Wheel Point.' At each of these points the maximum depth of excavation will be sixty feet, the distance however, will be quite short, (not exceeding one chain each) and the position of the cuts favorable for the advantageous application of labor to them.

Notwithstanding the face of this hill presents numerous obstacles which are calculated to render the line expensive, still the difficulties are far from being as serious as would naturally be anticipated by a casual observer.

The third division, commencing at station No. 56, passes over an undulating surface for nearly its whole length. The excavation on the dividing ridge between Bethel's and Shawnee runs, will be heavy, and also the embankments across those runs. The line, however, has been arranged, both in reference to direction and grade, so as to ensure a sufficiency of materials from the excavation to form the embankments, which is the only sure method of preserving a due degree of economy in the construction of this division of the work.

I now proceed to show the graduation of the line traced, which is as follows:—  
From Marietta to station

No. 8, dist. 24 chas. level.	
No. 8 to No. 19, do. 32 do. descent 20 ft. pr. m.	
No. 19 to No. 24, do. 15 do. level.	
No. 24 to No. 85, do. 136 do. ascent per m. 34 ft.	
No. 85 to No. 94, do. 27 do. level.	
No. 94 to P. rail way, 25 do. ascent per m. 34 ft.	

The point of intersection with the Pennsylvania rail way is found to be 81 feet above the point of starting at Marietta.

The minimum radius of curvature upon the line, (being at 'Spinning Wheel Point,') is 560 feet, but as the grade at this point may be reduced to 20 feet per mile, it will be unnecessary to apply the highest grades on any curves described with a less radius than 700 feet. The surface may therefore be considered as decidedly favorable for the use of Locomotive Engines on it.

This line of rail way, is one naturally calculated to be expensive in its construction yet it affords me pleasure to be able to assure you of its entire practicability, and to express my opinion, that when completed, its advantages will be found to be fully commensurate with its cost. Its object will be to place Marietta (which is admirably adapted, by its location, to accommodate an extensive rail way, canal and river trade,) upon an equal footing with Columbia. It will materially extend the facilities for trans-shipment upon the State Works, and whether viewed as an improvement by itself, supported as it would be by an extensive lumber, coal and canal trade, with a portion of the rapidly increasing passenger travelling—or, as a part of an extension of the Pennsylvania rail way to Harrisburgh, (which must ere long be made, as being the only natural, and in every point of view, the best route for a rail way, connecting Philadelphia with the Seat of State Government,) it will doubtless prove a profitable source of investment to its proprietors.

The estimate has been made both for the grading and superstructure of a double track of rail way, with the exception of about one hundred and fifty feet at Chicques Rocks, where, in order to save a large amount of

rock excavation, the two tracks are designed to be united in one. The graded surface of both excavations and embankments, is estimated to be twenty-two feet wide. The viaduct across Chicques creek, is planned with piers of crib work, below the water surface, and rubble masonry above. Superstructure to be of wood, constructed on Town's plan, lattice work, covered. The culverts are all estimated to be of rubble masonry—the one at Shawnee to be sixteen feet span, resting on abutments 4 feet high. It is proposed to support the embankments at the most difficult points between 'Spinning Wheel and Chicques Rocks,' with a stone wall varying in height from ten to sixteen feet.—But one road and one firm bridge will be required on the line.

The form of superstructure estimated for the road, consists of white oak sleepers, ten inches in diameter, placed four feet apart, and resting upon broken stone, compacted in longitudinal trenches, 16 inches wide and one foot deep. The sleepers to be notched, and oak rails 6 by 8 inches square, secured to them with wedges. The wood rails to be capped with iron plate rails 24 inches wide, by 5-8 inches thick, properly secured with iron spikes. This form of superstructure is selected, as being little liable to get out of order, and as being easily adjusted when repairs are required; it is also the cheapest form of road that could be adopted with a view to the use of locomotive engines upon it.

The following estimate represents the various kind of work required for the entire line, and is believed to be sufficient to complete it. The quantities have been made out with as much care as the nature of the examination would allow of and the prices are such, as I have no doubt the contracts could readily be taken for.

#### ESTIMATE.

42,430 cubic yards earth excavation a 10cts.	\$4,243
21,500 do do rock a 45cts.	9,675
184,100 do embankment, a 15cts.	27,615
2,600 perches vertical wall a 80cts.	2,080
5 culverts containing 1400 perches a \$2 50	3,500
Viaduct across Chicques creek,	8,213
Fencing and Bridges,	3,060
3 miles 69 chains, double track rail way, superstructure with turns out,	39,614
	<hr/>
	\$98,000
Add for contingencies, 10 per cent.	9,800

Total cost, \$107,800  
Respectfully submitted,  
EDWARD F. GAY,  
Engineer.

#### STRASBURG BRANCH RAIL ROAD.

This branch extends from the borough of Strasburg, Lancaster county, to the Columbia and Philadelphia Rail Road, near the water station at Lemons', extent about four miles. The whole stock has been taken, and the work it is expected, will be put under contract without delay.—*lb.*

#### CANAL FROM COLUMBIA TO TIDE.

Mr. Gay, the Principal Engineer, we understand, has completed the survey of this route without encountering any unexpected or great difficulty. The line to the head of the Union Canal is about 30 miles, and allowing five feet water, fifty feet in width, and double locks, the cost is estimated not to exceed 1,800,000 dollars. The projected scale upon which it is proposed to carry it into execution, though it does not exactly come up to our wishes, is certainly grand; yet hardly equal to the immense business which this line is destined to pass. The stock, it is understood, will be taken in an hour, did it amount to double the sum calculated.—*lb.*

## LANCASTER, MIDDLETOWN AND HARRISBURG RAIL ROAD.

Mr. Roberts, the Principal Engineer, we understand has nearly completed the surveys of this route, preparatory to placing the line under contract. Active operations, it is expected, will commence very shortly.—*Lanc. Journal.*

## DEPTH OF COAL VEINS.

The importance of ascertaining, by actual experiment, the depth of our coal veins below the surface of the ground is on all hands admitted, and though we have every reason to believe, judging from the analogy they bear to the coal deposits of other countries, that they extend downward to an immeasurable distance; nevertheless an experiment which could place this highly probable and general opinion on the solid basis

of certainty, has been with many for a long time a great desideratum. We are happy to announce that such an experiment is now begun on the Spohn Tract, where preparations are making to work below the water level, and to follow the vein in its descent to a distance which will place the subject beyond all doubt or controversy. For this purpose a steam engine will be employed and the work vigorously prosecuted. The greatest penetration below the surface yet made has not, we believe, exceeded a hundred feet in perpendicular descent, and even should the veins stop short at this point, of which we cannot think there is the remotest probability, still there would be Coal enough in our mountains to supply the consumption for years to come. We hope that the enterprising gentlemen who have undertaken the experiment above referred to, will meet with that success to which their exertions are so eminently entitled.—*Miners' Journal.*

## METEOROLOGICAL REGISTER.

*Extract from the Meteorological Register, taken at the State Capital—Harrisburg, Pennsylvania.*

By JAMES WRIGHT, Librarian.

NOVEMBER, 1834.

Day of the month.	Day of the week.	Sun rise.	1 o'clock, P. M.	Sun set.	Mean.	Height at sun rise.	Height at 1 o'clock, P. M.	Height at sun set.	Mean height.	Winds.	State of the Weather.
THERMOMETER.						BAROMETER.					
1	Saturday,	42	47	50	46	30.10	30.05	30.05	30.07	SE	Cloudy day
2	Sunday,	39	39	41	40	8	10	10	9	SE	Cloudy damp day
3	Monday,	41	46	47	45	15	10	10	12	SE	Cloudy day
4	Tuesday,	45	50	52	49	30.00	29.98	29.90	29.96	SW	" "
5	Wednesday,	50	53	51	51	29.85	87	92	88	W	" "
6	Thursday,	43	51	50	48	30 10	10	5	30.08	N	Clear day
7	Friday,	41	60	58	53	29.90	76	72	29.79	W	" "
8	Saturday,	50	56	51	52	77	87	96	87	W	" "
9	Sunday,	36	50	53	46	30.12	6	30.00	30.06	SW	" "
10	Monday,	41	52	55	49	29.90	90	80	29.87	SW	Hazy
11	Tuesday,	51	51	50	51	80	90	90	87	W	Clear day
12	Wednesday,	43	45	50	46	86	76	80	81	W	Cloudy day
13	Thursday,	37	49	55	47	80	80	68	76	W	Clear day
14	Friday,	44	53	56	51	50	47	47	48	NE	Cloudy damp day—r. at nig.
15	Saturday,	32	32	32	32	93	96	30.00	93	N	Cloudy day—snow at night
16	Sunday,	26	34	35	32	30.14	15	17	30.15	N	Cloudy day
17	Monday,	30	33	35	33	20	13	29.98	30.10	NE	Rainy day
18	Tuesday,	41	49	49	46	29.62	65	65	29 65	NW	Cloudy day
19	Wednesday,	45	48	48	47	65	65	65	65	NW	" "
20	Thursday,	44	48	47	46	63	67	70	67	NW	Clear day
21	Friday,	44	48	46	46	78	78	78	78	NW	" "
22	Saturday,	37	40	43	40	65	54	52	57	NE	Rainy day
23	Sunday,	43	42	40	42	58	60	66	61	W	Cloudy day
24	Monday,	35	37	35	36	70	75	78	74	W	" "
25	Tuesday,	34	39	41	38	59	60	60	60	NW	Clear day
26	Wednesday,	34	41	37	37	70	70	76	72	NW	Sun and clouds
27	Thursday,	30	46	45	40	96	80	70	82	SW	Clear day
28	Friday,	26	50	48	41	92	89	87	89	NW	Clear day
29	Saturday,	40	44	49	44	60	55	50	55	SW	Rainy day
30	Sunday,	34	48	45	42	90	90	90	90	NW	Clear day

## Thermometer.

Maximum on the 7th,	53°
Minimum on the 15th,	32
Difference,	21
Mean,	44

## Barometer.

Maximum on the 16th,	30.15 inches.
Minimum on the 14th,	29.48 "
Difference,	00.67 "
Mean,	29 83 "



From the Philadelphia Gazette.

## REMINISCENCES OF THE OLDEN TIME.

Messrs. Editors,—

As I know you have an affection for traits of olden time, and especially for such as aim to compare the present with the past, in our land of changing character; I have herein endeavoured to sketch you a few notices of men and things, made in "notes by the way," in a late trip to Harrisburg.

We started from Philadelphia, by the Rail Road Cars about the middle of the past month, (Jan.) making our way out of the city through streets, and lanes, where in our youth was nothing but woods, the remains of Penn's original forest—and passing in front of those formerly memorable country seats, Bush Hill, Springetsberry, &c. Fairmount once the selected spot of Wm. Penn's intended elevated seat, was wholly changed; all the surrounding hills were drawn away for the use of their gravel, and intersecting streets and houses, had marred all the former rural scenes. As we passed by the water works, now so renowned and useful, we could not forbear to remember the foresight and kindness of Dr. Franklin, who perceiving the change of the then excellent pump water of Philadelphia, bequeathed the city a legacy to enable it to conduct the water of Wissahicon to Philadelphia, and now behold we have a population to drink it dry! The invention of Rail Roads and of Locomotive machines, how far, very far beyond the forecast of the blindest conjectures. Such a bridge too, as we passed upon, over the Schuylkill! At the rates of progress in invention and improvement, where shall we be in another age or another century! Even the great Ice house above ground which we passed, presented a luxury and an improvement, which none before the Revolution, ever witnessed! In casting our eyes up and down the beautiful Schuylkill, we felt sad to think how all the former fisheries, and their picturesque accompaniments were forever ruined. Passing by the great Columbia bridge to the opposite bank, at the head of the inclined plane, there we cast our eyes over upon Judge Peters' place, and thought of it as the favorite country retreat of the Pater Patrie of our country; the place where Washington himself once planted the now big chestnut tree, which survives him, and all those who then and there enjoyed his social intercourse.

And now being seated in the comfortable cars, and rolled swiftly on our way, the mind reflects upon the present improved and enriched country, and its educated inhabitants, as compared with the past, so different now, from what it must have been, when Gov. Pownall (who has left us some leaves of his journal,) travelled by much of the same line of country out to Lancaster in 1754, as to a frontier town, where pack saddles, and guns constituted the chief manufactures for the western Indian trader. He found nothing then along this to mark his distances and distinguish his observations, but some *Inns*, such as have come down, by their former signs to the present day, to wit: the Buck, the White Horse, the Ship, the Wagon, the Tun, and the Red Lion. Where else shall we find taverns of such long continuance.

In time we enter upon the lands of the Great Chester valley, the same which made the Governor then wonder, that they should bring £5 an acre, and now behold they bring 50 to \$100! Here we began to find sleighing pretty good, even while the same snow had for several days run out at Philadelphia! Whiz, whiz! went our cars! Trees, houses, and people moving away from us like the shifting scenes on the stage, and soon we are at Lancaster, the great inland town. This was once the *dulce Domum* of the Conestoga Indians of that part called the Hickory tribe, because of their holding their Councils at the great hickory, then on the site of the present Court House Square, and near to Slaymaker's Hotel in East King street, where once

stood the first log Inn, by Gibson, having a hickory tree for a sign. In 1750, the town was first laid out, and in 1764, the same poor Indians who had given the soil, were cruelly murdered in the same town by the Paxton boys. There is still something very primitive in various parts of Lancaster. Several log houses of one and two story still remain. It was only as late as 1762, that at this town, several children were publicly advertised and bound out, as released prisoners from the Indians, who could find no parents or friends to claim them! From Lancaster to Harrisburg, the road presented the finest sleighing imaginable, and the passengers much enjoyed the treat of such an extended and swift sleigh ride, drawn by four lively horses. Taverns and farms lay all along the route, showing pleasing evidences of the improving hand of industry and skill. Yet settled as it seemed now, it was not long since, say but eighty years ago, that all this region was traversed by swartly Indians, and the beasts of prey had their game and their lairs. Now, I could no longer see the poor disconsolate and banished tribes; but I could at least identify myself with them, as to conceive that I saw often in passing, thousands of *tres* and numerous pleasant spots of ground, which they had seen, or by which they had been sheltered.

We come at last to the great river of the Susquehanna, and there see its towering hills, ranging all along the river on its southwestern side, producing a lively sense of the picturesque and beautiful—For ten or twelve miles, that we rode along the margin of the river, the mind went back to the contemplation of the once happy and peaceful homes of the numerous tribes of Delaware Indians which had been enjoying its comforts. By and by, we reach Harrisburg, the *City of the State*, where legislation and politics, interest or disturb so many. This was the site of the Plantation of John Harris, the Indian trader, who dwelt here as an advanced pioneer, and whose remains (buried in 1749) repose beneath his mulberry tree on the river bank of the town. Much could I say of him and of his heroic wife Esther, and of their life among the Indians of their day, but my article is already sufficiently long, and I here conclude.

W.

## THOMAS PARKE, M. D.

At a meeting of the Directors of the Library Company of Philadelphia, and of the Trustees of the Loganian Library, on the Twelfth of February, 1835—

On motion of Mr. Morgan, seconded by Mr. Lewis, the following Notice of the late Dr. THOMAS PARKE, was directed to be entered on the Minutes of both Boards:—

On the ninth day of January, Anno Domini 1835, our venerable Friend and Associate, Doctor THOMAS PARKE, departed this Life, in the eighty-sixth year of his age.

He was elected a Director of the Library Company of Philadelphia on the first Monday of May, in the year 1778; and the diligence, perseverance and fidelity manifested by him in extending the usefulness and prosperity of the Institution, induced its members to re-elect him, annually, from that day to the present time—a period of fifty-seven years.

His attachment to the Philadelphia and Loganian Libraries, and his anxiety to promote their respective interests, remained with him to the close of his life; and when his personal services should cease to benefit these Institutions, as a further evidence of his good feelings towards one of them, he made an appropriation, in his Will, for adding to the finances of the Library Company of Philadelphia, the sum of Fifty Dollars per annum, being a bequest of a perpetual ground rent of that amount.

When no longer able to attend the deliberations of the Directors and Trustees, he addressed a letter to one of his colleagues, in relation to the taxes on the Loga-

nian estate in Bucks county, in which he stated, that "in all my weakness I frequently think of the prosperity and welfare of our Libraries." At that time he felt so much debilitated as to doubt the restoration of his health, but added, "I pray for resignation to the Divine Will, and hope to be able to say, *not my Will, but Thy Will be done, O Lord!*"

His amiable disposition, the sincerity of his friendship, and the urbanity of his manner, strongly endeared him to his Associates, and they sincerely regret, that death has vacated his seat at this Board, and deprived his children of so estimable a parent and friend.

On motion,

Resolved, That a copy of the foregoing Notice of the late Dr. THOMAS PARKE be communicated to his family, and Mr. Poulson and Mr. Morgan were appointed a committee to communicate the same.

WILLIAM RAWLE, junior,  
Secretary.

From the Philadelphia Gazette.

## PROCEEDINGS OF COUNCILS.

May 27, 1835.

### SELECT COUNCIL.

The President submitted a communication from the Trustees of the Philadelphia Gas Works, in relation to the occupancy, by Mrs. Ford, of a portion of the premises allotted to the Gas Works by Councils. Referred to the committee on lighting and watching.

Mr. Lewis, from the Committee on Fire Companies, reported unfavorably on the application of the America Hose Company, for permission to erect a fire plug in their Hose House. The report was agreed to by both Councils.

Mr. Lewis, from the same committee, to whom had been referred the application of the Philadelphia Association for the Relief of Disabled Firemen, made the following report, the resolution attached to which was agreed to, unanimously, by both Councils.

*To the Select and Common Councils.*

The Committee on fire companies, having considered the petition of the Philadelphia Association for the Relief of Disabled Firemen, and examined the charter and regulations of the Company, believe that the said Association is calculated to increase the energy, and add to the already high character of our Fire Department. The institution appears to have been established for the purpose of forming by the contributions of our fellow citizens engaged in the meritorious duties of the department, a fund, on which those who fall victims to the accidents and bereavements of the profession, may depend for support and relief in case their condition in life is such as to make it necessary to apply for aid.—With a spirit of liberal charity, as wide and impartial as the sphere of their own active duties, they propose to extend the benefits of the institution to firemen who may receive injuries not members, and to all persons meeting with accidents from fires or fire apparatus. An institution founded on such principles, and conducted in accordance with the spirit of the charter; has long been wanting in our city, and will tend to produce unity of purpose and action in the associations on whom we rely for our safety from conflagration.

It therefore, in our opinion, has a legitimate claim on the public treasury, and we have annexed a resolution providing that the sum of one thousand dollars be paid over to the Treasurer of the Association, to form a part of its permanent fund.

Philadelphia, May 28, 1835.

Respectfully submitted.

LAWRENCE LEWIS, Chairman.

FRED. FRALEY,

JOHN S. WARNER,

JOHN M. BARCLAY.

Committee on Fire Companies.

Resolved, That the Mayor be and he is hereby authorised to draw his warrant on the City Treasurer in favour of H. G. Rowly, Treasurer of the Philadelphia Association for the Relief of Disabled Firemen, for the sum of one thousand dollars to be invested as part of the permanent fund of said Association, and charge the same to appropriation No. 21.

Mr. Price made the following report, which was agreed to, and the committee discharged.

*To the Select and Common Councils.*

The special committee on the legacy of Samuel Scottin, deceased, immediately after the receipt of the 72 dollars, for six years arrearages of ground rent, due June 1, 1834, from John Long, proceeded to the distribution of the same in bread to the poor, under the directions of the will; and made a contract with three bakers, viz: John English, Andrew Harman, and John C. Bernbaum, for the delivery of five cent loaves at four cents each. Your committee had orders printed as follows, viz:

"Deliver to the bearer, two five cent loaves of bread, in conformity with the will of Samuel Scottin, deceased; to deliver bread to the poor of the city, and of Southwark, taking care, that none but the needy get it, and that not more than *two loaves* be delivered to any one family."

Three hundred tickets were distributed on each baker, equal to 900 tickets, or 1800 loaves of bread at four cents each, makes 72 dollars.

The proper distribution of these tickets were entrusted to the several benevolent institutions, as follows, viz:

The Southwark Soup House.

The Union Benevolent Society.

The Provident Society.

The Society for relief of Sick and Infirm Poor.

And the House of Industry.

Your committee having completed the service, offer the following resolution, that the committee be discharged.

RICHARD PRICE, Ch'n.

WILLIAM H. KEATING,

JAMES HUTCHINSON,

HENRY J. WILLIAMS,

Committee.

Mr. McCreedy, from the committee on cleaning the city, made a report in relation to petitions for repairing the curb and gutter in Appletree Alley, and for the removal of obstructions in the streets, caused by the city carts, stating that the first should be referred to the paving committee, and that the second had been obviated by a request to the superintendent. Agreed to.

Mr. Keating made the following report, the resolution attached to which was agreed to.

The joint select committee of the Select and Common Councils to whom was referred a resolution, "requesting the Mayor to enquire into any complaints made to him on the subject of the hackstand at the corner of Sixth and Sassafras streets, and to take the necessary order in relation thereto,"—Report,

That after enquiry made from the Mayor, the City Commissioners and other persons, they have ascertained that a hackstand was established by the City Commissioners, in Sixth street between Vine and Sassafras streets, but that at the request of sundry citizens it was since removed to Franklin street, between Vine and Sassafras. That many hackmen disliking the latter stand have in violation of the ordinance continued to occupy Sixth street as a stand, and that complaints were made to the Mayor of the breach of the ordinance, with a view that he should exact the fine from the delinquents. This he has declined doing from a conviction that he had no right to enforce the fine. The Supreme Court having decided that Councils have no authority to confer jurisdiction on the Mayor and Aldermen or Justices of the Peace.

But the Legislature have lately, by the 7th section of an act entitled "A supplement to an act to incorporate the city of Pittsburgh, and for other purposes," passed at the close of the last session, conferred upon Aldermen and Justices of the Peace of every city, incorporated township, and borough in this Commonwealth, power to hear and determine all actions of debt for penalty, for the breach of any ordinance, by law, or regulation of such city, township or borough, in the manner therein provided. This remedy does not interfere with the former one, to proceed against delinquents by indictment in the Mayor's Court, and as the police have now the right to request the City Solicitor to institute a prosecution whenever they deem it expedient, and any citizen who feels himself aggrieved by a refusal on the part of any backman to comply with the ordinances of Councils or the regulations made by the City Commissioners in pursuance thereof, may enforce the penalty by summary process before any Alderman. The committee are of opinion that no further action on this subject is at this time required. They therefore report back to Council the resolution referred to them with an expression of their opinion that the passage of it at this time is not expedient—and they offer the following resolution:

Resolved, That this committee be discharged from the further consideration of this subject.

WM. H. KEATING, Chairman.

JOHN WIEGAND,

H. J. WILLIAMS.

Messrs. Price, Lippincott, Wiegand, Lewis, Barclay, Keating, and McCreedy, presented petitions praying Councils to purchase the right of the burial ground in Franklin Square. Referred to the committee on public squares.

Mr. Price presented a petition from city watchmen, asking extra compensation for labor required on patent lamps within their beats. Referred.

Mr. McCreedy offered the following resolution, which was adopted:

Resolved, that the committee on public squares be instructed to report to Councils the location of the railing around Washington Square and its distance from the curb stone, before erecting the same.

#### AN ORDINANCE.

Providing for Public Clocks, and a City Observatory.

Section 1. Be it ordained and enacted by the citizens of Philadelphia, in Select and Common Councils assembled, That the committee on public squares are hereby authorized to erect a City Observatory, in conformity to a plan to be approved by a committee of the "American Philosophical Society for the promotion of useful knowledge," in conjunction with said committee, and to procure the clock, transit, and other instruments, so that the said observatory may be fully complete in obtaining a standard city time, and astronomical observations. Provided, That only one half the expenses (not to exceed \$5000) attending the same shall be paid from the city treasury, and that the remaining moiety be paid by the said society, and provided also, that the location of the said observatory shall be submitted to be approved of by the councils.

Section 2. And be it further ordained and enacted by the authority aforesaid, That the "American Philosophical Society for the promotion of useful knowledge," is hereby authorized to nominate, and the mayor of the city to appoint an astronomer, whose duty it shall be to have charge of the city observatory; and who shall, at least three times a week, when practicable, make such observations as will enable him to determine the true time, and transfer the same correctly to an astronomical clock, to be provided and located by the American Philosophical Society, in a central situation, as near as convenient to the City Hall, so that watchmakers may be enabled to regulate their time keepers; and for

his services he shall receive two hundred dollars per annum, payable quarterly.

Section 3. And be it further ordained and enacted by the authority aforesaid, That Philip Garrett, Isaiah Lukens, Ellis Clark, Thomas Voigt, Wm. H. C. Riggs, and David Weatherly, watchmakers of the city of Philadelphia, be, and they are hereby appointed a "Committee on public Clocks," and are empowered to take the direction of all clocks that councils shall declare public, and they are hereby authorized to nominate, and the mayor of the city to appoint a suitable person to take charge of and regulate all the public clocks, and whose salary shall be two hundred dollars per annum, payable quarterly.

Section 4. And be it further ordained and enacted by the authority aforesaid, that the committee on markets is hereby authorized to make suitable accommodations for a public clock and bell, at the east end of the market house in High street west of Broad street; and that the committee on public clocks is authorized to procure under the direction of said Committee on Markets, the said clock and bell, and also a new clock, to be located in place of the old one, now at Second and High streets.

Section 5. And be it further ordained and enacted by the authority aforesaid, That the clocks in the following locations shall be hereafter public clocks, viz:—at the State House; at the Market House Pine and Second streets; at St. Augustine Church, whenever the same is vested in the city corporation; with an agreement that no rent shall be charged for the use of the cupola, and the access thereto; at the Market house, High and Second street; and the one to be placed at the market house in High street, west of Broad street.

Section 6. And be it further ordained and enacted by the authority aforesaid, That the Mayor is hereby authorized to draw on the city treasury for the expenses that shall be incurred under the provisions of this ordinance; and that the ordinance enacted September 19th, 1833, entitled "An ordinance providing for the regulation of time keepers," be, and the same is hereby repealed.

Enacted into an Ordinance, in the City of Philadelphia, this 28th day of May, in the year of our Lord, one thousand eight hundred and thirty-five.

HENRY TROTHER,

President of Common Council.

WM. M. MEREDITH,

President of the Select Council.

Attest—J. G. CLARKSON,

Clerk of Select Council.

#### HIGH STREET RAIL ROAD.

At a general town meeting of citizens, opposed to the destruction of the Market Houses, on Market street, for the purpose of making a rail road down the same, held agreeably to public notice, in Independence Square, on Wednesday afternoon, June 2d, at 5 o'clock, CADWALLADER EVANS, Esq. was appointed President, and Jos. Worrell, Paul Beck, Jr. Lewis Taylor, Roberts Vaux, and Alexander Hampton, Vice Presidents, and Wm. H. Davis and John Coopers, Secretaries.

On motion Resolved, That a committee of five be appointed to draft resolutions, expressive of the sense of the meeting.

The committee having returned, reported the following preamble and resolutions, which were on motion unanimously adopted:

Whereas, it is believed that the present commercial prosperity and flourishing condition of Market street is mainly, if not entirely attributable to the early erection and continued existence of the market houses thereon, presenting, as they necessarily do, the strongest inducements for the daily collection of thousands of citizens from all parts of our city and county, and many parts

of our state, drawing with them, by an impulse the most natural and reasonable, to the busy scene, the merchants and traders from every section of the union, who visit our city to purchase their supplies of merchandize of every description. And whereas, the effect naturally and inevitably depends upon the cause, it is believed that the removal of the market houses from Market street, independently of the immense expenditure of public money which it would necessarily involve, would be unwise, impolitic and ruinous to the great commercial interests of this most magnificent street, which has long excited and still continues to excite the admiration of every stranger who visits our city.

Therefore, Resolved, That in the opinion of this meeting, the present location of the market houses in Market street, is highly judicious and proper, well calculated to promote the interests and subserve the convenience of the great body of the citizens of Philadelphia.

Resolved, That the high degree of prosperity which the citizens of our city have experienced during the greater part of the last century, the immense increase of the value of real estate, especially in Market street, since the erection of the market houses there, admonish us in the sober language of wisdom, not to abandon, for light and transient causes, that which long experience has proved to be essentially good, in the vain and delusive hope that we may possibly do better.

Resolved, That nothing short of the most palpable evidences of the existence of evils of great magnitude, affecting the interests of the citizens generally, or the clearest demonstration of advantages of vast importance to the community at large, by changing the location of the market houses, could possibly justify a measure involving in its consequences the expenditure and loss, in all human probability, of more than a million of dollars, and the temporary, if not permanent destruction of the business of the most valuable street in our city.

Resolved, That no evidence of such a character, or even bearing the stamp or colour of plausibility, has as yet been adduced by the projectors of the plan for removing the market houses. That the scheme, thus far, appears to be speculative, visionary, and unsustained by any data or practical experience in reference to its ultimate effects.

Resolved, That inasmuch as we believe the projected alteration in relation to the market houses, to have originated in a misconception of the true interests of our city, perhaps in the heat of speculation that now pervades this community, it is our duty by all fair and honorable means, to endeavor to prevent so great a calamity from befalling our city.

Resolved, That a committee of one from each ward be appointed by the chairman to prepare a demonstration against removing the market houses, to cause it to be signed by the citizens, and presented, without delay, to Councils. That said committee have power to call meetings of the citizens whenever they may deem it necessary to promote the object of this meeting.

Resolved, That we fully concur in the preamble and resolutions passed at a meeting of citizens held at the Mansion house, corner of Eleventh and Market streets, on the evening of the 27th ult.

Resolved, That inasmuch as Broad street is situated in the centre of our city, we approve of the Rail Road on that street, and we cannot see any just and reasonable ground to extend the same, while that street is susceptible of accommodating all the business of the Rail Road, and while there remains so much vacant ground for the erection of Depots, at a cost of 25 to 50 per cent. less than ground could be obtained in Market street.

Resolved, That in the opinion of this meeting, Rail Roads passing through our city, would not answer the purpose the advocates of the measure anticipate: as the Southwark and Willow street Rail Roads fully prove; saving, that of conveying a few passengers to and from the bridge, at the foot of the inclined plane.

Resolved, That in the opinion of all Forwarding Merchants on Broad street, taking all circumstances into consideration, goods or produce can be conveyed from Broad street, and sent to any part of the city at less expense, by drays or carts than by Rail Road cars.

Resolved, That in the opinion of practical men, the destruction of our Market Houses and making a Rail Road to the Delaware, would be attended with the enormous expenditure of two millions of dollars—the interest of which, for one year, would pay for all the drayage and carriage of goods sent to and received from Columbia during the same period.

Resolved, That by making Rail Roads through our city, it not only decreases the value of property between the terminating points, but must inevitably endanger the lives of citizens, and prove a serious detriment to all kinds of business, more especially the retail branch.

Resolved, That we cannot see the justice of taxing the many for the benefit of the few. The owners of property in the western part of our city, many of whom are widows and orphans, have been paying heavy taxes for their unimproved property, while the owners of property in the eastern section, have been receiving immense incomes therefrom.

Resolved, That the security of vested interest, and the improvement of the central, as well as the western part of the city, require that this question should be speedily set at rest, by a vote of Councils on the subject.

On motion, adjourned.

CADWALADER EVANS, *President.*

JOS. WORRELL,

LEWIS TAYLOR,

PAUL BECK, JR.

ROBERTS VAUX,

ALEX. HAMPTON,

*Vice Presidents.*

William H. Davis,

John Conyers,

*Secretaries.*

## THE REGISTER.

PHILADELPHIA, JUNE 6, 1835.

There has been a general turn-out of Carpenters, Shoemakers, &c. respecting the hours of working—they claiming to labor from 6 to 6. Numerous meetings and processions have taken place, on the subject. It appears by the following proceedings of Councils, that the labourers are to be employed by them during these hours.

From the U. S. Gazette, May 5.

6 TO 6.

Last evening the City Councils passed a resolution fixing the hours of labor for persons employed by the city, from 6 to 6, allowing one hour for breakfast and one hour for dinner.

The following is the resolution:

Resolved by the Citizens of Philadelphia, in Select and Common Council assembled, That the hours of labor, of the Working Men employed under the Authorities of the City Corporation, shall be, from "SIX TO SIX," during the summer season; allowing one hour for breakfast, and one hour for dinner.

SALES OF REAL ESTATE.—The Masonic Hall has been purchased by Mr. Wm. Swaim, for \$110,550. The front on Chesnut Street is 101 feet.

The property known as the "Wharton House," south Fifth street, extending south from Prime to Federal streets, and west to Arrabella street, was lately sold for \$15,000. This was during the revolution, the place where the great Ball, usually designated the mischianza, was given to Gen. Howe.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.--NO. 21.

PHILADELPHIA, JUNE 13, 1835.

No. 388.

LEWIS DAVID VON SCHWEINITZ, P. D.

A Memoir of the late Lewis David Von Schweinitz, P. D., with a sketch of his Scientific Labours. Read before The Academy of Natural Sciences of Philadelphia, May 12th, 1835.

By WALTER R. JOHNSON.

Among the small number of native Americans, who had thirty years ago begun to make natural history an object of deep and curious research, is the name of one whose memory may, upon various grounds, claim the respect and veneration of all the admirers of scientific excellence. It is not less a dictate of the heart, than an impulse of the heart, to honor those who have stood forth as the leaders in new, useful, and difficult enterprises. Even persons who themselves never enter the same career, may still participate largely in the sentiment of gratitude for those efforts which have had in view, the improvement of society by additions to its treasures of knowledge. But the obligation to respect, is felt with a double force by those whose pursuits are of a character congenial with that of the individual, who has thus made himself a pioneer in a laudable undertaking. And if to this common bond be added that of personal intercourse and intimacy, and a reception of great and lasting benefits from his labours and his liberality, it must be obvious that reason, feeling, and duty, alike demand the grateful remembrance of one who has so judiciously directed the current of his kindness and bestowed the fruits of his industry.

Standing in this relation to the object of the following brief memoir, the members of the Academy of Natural Sciences are probably prepared to expect from their organ on the present occasion, but an imperfect representation of the emotions which were felt on learning the demise of our late valued associate, and perhaps to excuse a still more imperfect display of his various attainments and excellencies of character.

Lewis David Von Schweinitz was born at Bethlehem, Northampton county, Pennsylvania, on the thirteenth of February, 1780. His father Hans Christian Alexander Von Schweinitz was of an ancient and distinguished family in Silesia in Germany, and exercised here, the functions of superintendent of the fiscal and secular concerns of the "Unitas Fratrum" or *Moravian Brethren* in North America. His mother was Dorothea Elizabeth de Watteville, daughter of Baron, afterwards Bishop, John de Watteville and of Benja who was a daughter of Count Zinzendorf. Of the last mentioned ancestor, it may not, for reasons which will appear in the sequel, be inappropriate to make a passing reminiscence.

Nicholas Lewis Count Zinzendorf was born at Dresden in 1700, and was celebrated in his youth for forming religious societies, six or seven of which, are said to have originated from his own efforts, and one at least to have been planned at the early age of ten years.

He was associated with Watteville in founding the great missionary system of the "Unitas Fratrum." At the age of twenty-one he became Count of Berthelsdorf in Lusatia, by purchasing the estate appendant to that title, and soon after established there the village of Herrnhut, whence the Moravians are sometimes called

*Herrnhutters*. In prosecution of his favorite scheme, he, in connection with his new colony, many of whom were natives of Moravia, commenced the sending of missionaries to instruct the heathen; and at the end of nine years, though their numbers did not, when they first made the attempt, exceed 600, had actually formed establishments in Greenland, St. Thomas, St. Croix, Surinam, Rio de Berbice, among the Indians of North America, and the Negroes of Carolina, in Lapland, Tartary, Algiers, Guinea, in the Island of Ceylon and at the Cape of Good Hope. In his ardour for attaining this favourite object, Zinzendorf made various journeys through Germany, Denmark, Switzerland, Holland, England and America. In 1742 he held frequent religious discourses at Germantown, in this vicinity, and in the same year, in a Latin speech delivered in Philadelphia, formally renounced his title of Count, resumed his original family name of Von Thumstein, and became familiarly known to the Quakers of that period under the designation of "friend Lewis."

It was under his immediate agency that the colony at Bethlehem was founded. He did not, however, attain all his successes without undergoing both in Europe and America, several bitter persecutions: but these probably served, as usual, only to bind his followers in a firmer union, and more effectually to insure their prosperity. After having established his plan in all the four quarters of the globe, and sent out about 1000 individuals to proclaim his doctrines, he finally died at Herrnhut in 1760, where we are informed, his obsequies were attended by 2000 of his followers, and his body borne to the grave by 32 of those messengers of his faith who were at the time assembled there from Holland, England, Ireland, Greenland, and North America.

The contemplation of this example, of a man who was at once the ancestor of his family and the father of his denomination, with that of other distinguished progenitors, early impressed the imagination of the youthful Schweinitz with an ambition for a career of similar activity, and gave the first impulse towards the acquisition of literary and scientific eminence.

The society of those friends with whom the early years of his childhood were spent, was calculated to inspire him with the same affections and views which had operated on his ancestors for two generations. His mind was here imbued with those principles, which, at a later period, shone forth in the purity and simplicity of his manly character.

Endowed with powers of conception of no ordinary cast, he gave early indications of his bias for intellectual pursuits, and by his assiduity more than compensated for any deficiency in the means of improvement then within his reach. The clear and explicit manner in which his juvenile ideas were expressed, encouraged his fond parents to indulge the hope, that he would one day become an active instrument for advancing the cause to which themselves and their predecessors had been so assiduously devoted. Being the eldest son of his parents, and, at that period, of delicate constitution, it is reasonable to suppose that maternal influences had much to do in the development of his faculties.—It was, moreover, on the side of his mother that he was related to Watteville and Zinzendorf; hence, we may

readily suppose that from this source he derived the partiality for addressing to his friends short speeches and little sermons with which he is said occasionally to have amused the circle around his paternal fireside.

We are aware that, in general, anticipations founded on an exhibition of precocious talents are apt to be signally disappointed; but when the display is that of an intellectual *tendency*, rather than a mere capacity for some one attainment, and when the *spirit* for mental labour is found capable of being directed into different channels at the instance of others, and does not consist of a blind instinct compelling the possessor to follow some narrow path of intellectual effort, the augury may, we apprehend, be received with less doubt and uncertainty. Such was the case with Schweinitz. His mind was vigorous, and his temperament enthusiastic. The first direction of these qualities was given by his relatives as they dwelt on the unwearied and successful exertions of his ancestors among the fraternity, in promoting whose interests he was taught to feel that it would be most honorable to excel; the second was subsequently given by his teachers, when, by the casual exhibition and explanation of some specimens in natural history, they struck a vein of talent, part of the same rich mine, which had before only here and there, "cropped out" above the surface.

On the 4th of July, 1787, at the age of little more than seven years, young Lewis David was placed in the institution of the Moravian community at Nazareth, where he continued for eleven years, or until 1798, and where he sedulously availed himself of every opportunity for the acquisition of knowledge. The period of instruction,—as generally happens when parental precept and example have prepared the way for a relish of knowledge,—was to him a season of delight, a scene of his life to which he ever after reverted with peculiar pleasure. Here were formed those habits of practical wisdom, which, when subsequently methodized in the schools of Germany, produced that happy balance of the faculties, without which the most brilliant talents may be wasted, either on ill-directed efforts, or on wild and fanciful theories. His powers of language, and his vein of satirical humour, were at this time occasionally put forth in the form of poetical effusions, turning the fruits of his leisure hours into harmless amusement for his companions.

The apparent facility with which he afterwards composed in the Latin language, induces the belief that his early classical instruction was of a very respectable order, and certain it is that the qualities of his heart were not neglected; his moral character was built on the broad and liberal basis of justice, love and charity, so distinctly inculcated in the doctrines of his community.

In the baneful spirit of uncharitableness he saw nothing either lovely or respectable; it never found a lodging in his heart, and he had accordingly, no occasion in after life to eject so unprofitable a tenant.

His first impulse towards the study of Botany had been received at Nazareth, before being placed as a pupil in the institution. When a mere child, being on a visit to that place in company with his grandfather, Bishop de Watteville, it chanced that a specimen of the *Lichen digitatus*, lying on a table in one of the apartments of the school, attracted his attention, and led to a few observations on its name and physiology. From this moment he dated his own partiality for the beauties of the vegetable kingdom. When his abode was afterwards fixed at the school, and he enjoyed the advantage of some instructions in the elements of botany from one of the teachers\* in the seminary, he pursued his researches in this delightful science with the most enthusiastic ardour. He seems to have been, in truth, a very child of Flora, and with the vernal breath of that divinity to have inhaled all the benign influences which

the beauty, simplicity and grandeur of *Nature's truth* are every where fitted to inspire.

A partial flora of Nazareth and its vicinity, formed at this early period, is still among his manuscript papers, and the occupation which its composition afforded to his moments of relaxation, continued through life to constitute the delight of his leisure hours. Such was his progress in many attainments, that before the close of his connection with the Nazareth institution, young Schweinitz was appointed to participate in the duties of instruction, by taking charge of some of the junior classes in that seminary.

In 1798 his father was called to Germany, whither he was attended by his family, and where the subject of this memoir, then a youth of eighteen, was in the same year established as a student in the theological institution at Niesky in upper Lusatia. Here, enjoying an intercourse with young men of decided and acknowledged talent, and entering on studies which excited a generous emulation, his faculties were roused to redoubled energy, and his application became proportionally intense. The late excellent J. B. de Albertini, then one of the professors in that institution, exercised a powerful influence on the mind of Mr. Schweinitz, and to his clearness and simplicity of views, his scientific and truly philosophical ideas, was the subject of our remarks indebted for much of that justness of thought and firmness of principle, which carried him with success through the active duties of life. The mutual esteem thus formed between the pupil and his teacher, was afterwards, by similarity of pursuits and predilections, matured into the closest intimacy. While prosecuting his studies in this place, Mr. Schweinitz enjoyed, by means of his extensive connections, an opportunity of mingling much in society, of which his cheerful and sprightly conversation rendered him the common centre of attraction. But neither in this situation, nor in his subsequent foreign journeys, did his feelings ever swerve from an attachment to his country; and yet it was not from him that any modern traveller has learned the practice of vilifying every country through which he passes, much less, on returning home, that of bestowing on his *own*, by way of reparation, a double share of the same abuse.

After completing his theological studies, Mr. Schweinitz engaged as a teacher in the Academy at Niesky, and by this means, enlarging and strengthening his own acquisitions, realized the truth of the maxim, *docendo discimus*.

The presence of several valued friends engaged in the same pursuits, the cultivation of his favourite department of botany, a connection with his cherished associates, Professor Albertini and Henry Steinhauer, (from England,) and the opportunity of improving his taste for literature by various reading and frequent composition on the prominent subjects discussed in the literary journals of the day, all contributed to the improvement and happiness of Mr. Schweinitz, and rendered the arduous duties of his station a pleasure rather than a burden. Scarcely any important topic in the wide field of science, escaped his notice, and especially did the constitution and management of the affairs of his social and religious fraternity, call forth from his pen many able and spirited articles.

From the commencement of his residence at this place, his botanical researches had been particularly directed to the *Fungi*, a department previously much neglected, and in 1805, the number of new genera and species discovered by himself and Albertini was so great as to warrant the publication of a volume of about four hundred pages, containing the result of their united efforts. As we shall again recur to this, in connection with his other performances, it will not be necessary here to interrupt our remarks to present its peculiar merits as a scientific production.

Near the close of his residence at Niesky, he began to exercise the functions of a preacher, and was, in

\* Mr. Kramtsch,

1807, called to the Moravian settlement at Gadenburg, in Silesia, where his acquisitions were soon turned to good account in various ways connected with his profession. Besides pastoral duties, he again discharged the office of a teacher, in bringing forward many of the young men of his community, who were preparing for the duties of his own calling. Upon his character as a preacher, there is the less necessity that we should comment, even were this the place, and I were we competent to such an undertaking, because, in that capacity, his brethren have already exhibited to the public a view of his meritorious labours.\* We would merely state, that, considered as literary performances, his sermons were characterized by the utmost simplicity, both in style and delivery, and were addressed more to the heart than to the head. His discourses were invariably practical, not argumentative;—experimental, not speculative.

The period of which we are speaking, it will be recollected, was that of Buonaparte's continental wars, and Germany, the scene of his operations. Mr. Schweinitz was, therefore, with his peaceful flock, brought into immediate proximity to the actors in those tremendous conflicts. But, though troops were quartered in Gadenburg, his happy disposition and winning deportment gave him such ascendancy over all ranks as to avoid causes of collision, and to render him a general favourite with strangers.

In 1808, Mr. Schweinitz was invited to Gaadau, in Saxony, where, in the discharge of duties similar to those at Gadenburg, and with equally distinguished success, he continued to be engaged until 1812, when he was appointed by his brethren, general agent of their church in the southern states of this Union. Previously to repairing to the scene of his duties, he formed a matrimonial alliance at Niesky, with Louise Amelia Le Doux, whose parents, descendants from highly respectable French ancestors, resided at Stettin in Prussian Pomerania. The continental system of Napoleon at that time rendering direct communications with this country extremely hazardous, they were compelled, in order to embark for the United States, to take the route through Denmark and Sweden. This circumstance was not wholly without its advantage; for, on arriving at Kiel, in Holstein, an occasion presented itself for a protracted stay, during which Mr. Schweinitz became acquainted with several learned men connected with the University in that place, and the mutual satisfaction was such as to induce the institution during the same year to confer on him the honorary degree of Doctor in Philosophy.

About the period of their final embarkation, the United States had declared war against Great Britain; the seas swarmed with privateers, and to try their firmness still more severely, a tempestuous voyage ensued, terminating in a tremendous storm, by which their vessel was destroyed, and a horrible suspense for a time hung over their destiny.

A journal kept on his voyage manifests, however, the fervent and patriotic feeling which cheered the heart, and buoyed up the hopes of Mr. Schweinitz, in the near prospect of extensive usefulness in the land of his nativity.

The immediate scene of his duties was the establishment at Salem, Stokes county, North Carolina, where amidst the secular and ecclesiastical duties of his office, he found time to prosecute the study of botany, in a dominion, scientifically speaking, *all his own*. The first fruits of this labour were given to the world in 1818, through the commentaries of the Society of Naturalists at Leipsic, under the editorial care of his learned friend Dr. D. F. Schwaegrichen, and is entitled "Synopsis Fungorum Carolinae Superioris." In the same

year his duties required him to attend a meeting of his religious brethren at Herrnhut. On his way thither, he visited England, France and Holland, where he established correspondences which were afterwards of great service; when, on his return, he began the formation of a regular herbarium.

In 1821, Mr. Schweinitz published, at Raleigh, N. C. a pamphlet containing a description of seventy-eight species of *Hypoleucis*. This he produced as a mere specimen of the cryptogamic flora of North America, intended to excite a more general attention among our native botanists, to this undeservedly neglected branch of natural history. In the same year he sent to Professor Silliman's Journal his Monography of the genus *Vicia*, a valuable paper, often cited by European naturalists.

At the close of this year his residence was transferred to his native village of Bethlehem, where the secular office of general agent for his brethren was retained, the charge of superintending the institution for the education of females accepted, and the study of his darling science unremittingly pursued. To range once more, in the vigor of his scientific maturity, over the same scenes in which had been sown the seeds of his usefulness, and where had budded the promises of his early youth, imparted new energy and assiduity to his efforts. The beautiful slopes and valleys about Bethlehem and Nazareth, the romantic banks of the Delaware, and the precipitous rocks of the Lehigh, all yielded up to him a tribute of their hitherto unexplored treasures. The high estimation set upon his works by men of science, had procured his election as an honorary member in several societies devoted to natural history, both in Europe and America. His correspondence increased, and the formation of his herbarium advanced with great rapidity.

In 1823 he was desired to examine and describe the plants collected by Mr. Say on the expedition of Major Long to the sources of the St. Peter's river. This task he undertook with that diligence which signalized his real merit, expressing his regret that the unavoidable absence of Mr. Nuttall from the country should have prevented him from executing this undertaking, agreeably to previous arrangement, and passing on that gentleman a high and delicate eulogium; how richly merited, this Academy needs not to be informed.

Near the close of the same year, he also communicated to the Lyceum of Natural History at New York, a valuable paper, containing instructions for determining the American species of the genus *Carex*, a work, which, though less imposing in appearance, must doubtless have cost more intense application, and more exact powers of discriminating between specific characters, than would have sufficed for the description of many new species of plants.

In 1824 Mr. Schweinitz communicated to the American Journal of Science a short paper on the rarer plants of Easton, Pa., almost all of which, he remarks, are principally met with on the shady rocks up the Delaware, or at the mouth of the Lehigh.

In the same year appeared his Monograph of North American *Crices*. Being about to embark a third time for Europe, this paper, together with a large collection of the specimens from which it had been prepared, was placed in the hands of his friend, Dr. Torrey, with a desire that it might be communicated to the Lyceum of Natural History, and giving him full liberty to use his discretion in the additions or alterations which it might, from subsequent discoveries of his own, seem to demand. Finding, on his return, that his editor had made important additions to the number of species, the honourable mind of Mr. Schweinitz led him to request that it should appear as their joint production, remarking that "the judicious and elaborate amendments he has proposed, and the mass of new and valuable matter he has added, entitle Dr. Torrey to a participation in the authorship of the work." This incident is men-

\* See the United Brethren's Missionary Intelligencer, vol. v. p. 97.

tioned only as indicative of the feelings and dispositions of the man.

The voyage this year undertaken, was with a purpose similar to that of 1818, and on both occasions he exercised on the deliberations of his brethren at Herrnhut a decided and salutary influence.

During his absence from the country his paper on the new American species of *Spheria*, one of the largest genera of the Fungus tribe, was communicated to this Academy, and appeared in the fifth volume of the Journal.

On his return, near the close of the year, his pursuits, except the superintendence of the literary institution, which he had previously relinquished, were resumed, with his wonted alacrity. The great work to which he now devoted his leisure was the Synopsis of North American Fungi, which was originally designed for publication in some of the European journals, but which he was induced to present, in 1831, for insertion among the collections of the Philosophical Society of this city.

Until the year 1830, the health of Mr. Schweinitz had been excellent, and his spirits uniformly cheerful; but the various and increasing cares of his official station, with the sedentary employment of composing a dissertation on the affairs of his community, during which his usual excursions and exercises were omitted, wrought a visible change in the state of his health; a severe cough ensued, with other alarming symptoms, which gave his friends just grounds for apprehension. From this time his health seemed gradually to decline. The want of his accustomed occupations in the open air also depressed his spirits, and produced a marked contrast to that buoyancy which had hitherto shed its influence on all around him.

A journey to the western states, undertaken in connection with his official duties,\* appeared for a short time, to revive the energies of his frame. But though externally more active and cheerful, the deep workings of disease had undermined his system, and on the morning of the 8th of February, 1834, being awakened at an early hour by a sensation of faintness, and when relieved by medical applications, again relapsing for a short time into a state of repose, he fell, at the age of 54 years, calmly and unconsciously into the arms of death.

A widow, and four sons at an age most needing a parent's counsel, survive to mourn his loss.

Such, gentlemen of the Academy, is a very inadequate view of the life of your lamented associate; a life of various, constant, unobtrusive usefulness.

In person, Mr. Schweinitz was of the middle stature, of full and robust habits, a florid and healthful countenance. The print accompanying this paper is from a miniature, taken some years before his decease, and is consequently more youthful than the appearance with which our memories are now impressed, but is regarded by his family as having been a very correct likeness at the time it was taken. We have space but for a few words in regard to his social habits.

The colloquial powers of Mr. S. were of a high order. Humour, wit, anecdote and repartee were always at his command. In the multiplied relations with society he had contracted that ease of intercourse which tends so essentially to conciliate the kind affections.

Hence, though always listened to with profound respect when in the discharge of professional duties, whether as a teacher or a clergyman, yet the sphere of his greatest usefulness was the social circle, and the familiar intercourse which he maintained with the people of his own persuasion. In the exchange of thought, the imparting of sympathy, and the expression of fraternal feelings, so habitually cherished by the class of society with which it was his fortune to be connected,

and in the deep sense of responsibility under which he appears to have constantly acted, we find the immutable guarantees for that uprightness and the best explanation of that social influence which characterized our departed friend.

The literary attainments of Mr. Schweinitz were those belonging to the scholar and the gentleman. He was acquainted with the Greek and spoke and wrote the English, German, French and Latin languages. Unlike most persons of German descent, but in common with Pope, Scott, and some other eminent men, he was entirely insensible to the charms of music; yet as we have seen, this circumstance did not involve him in the celebrated category of Shakespeare; for though *no music*, he surely had abundance of *harmony* in his soul.

Our sketch of the scientific labours of the deceased, must necessarily be confined to some leading points in the general character of his more important works, and a brief account of his collections.

When we consider the extreme difficulty of the particular departments of Botany to which Mr. Schweinitz devoted his chief attention, the prodigious number of facts which he has accumulated, the vast amount of minute and delicate investigation demanded by the nature of the objects of his study, the labor of preparing for the press the materials which he had brought together; when we recollect, that, with the exception of Dr. Muhlenburg of Lancaster, no American botanist had ventured far upon this wide and unexplored dominion of nature; and when we remember that this science was his relaxation, not his profession; his occasional pursuit, not his daily duty, we are forcibly struck with the high order of his talents for the pursuit of physical science, and cannot but regret that more of his time and energies could not have been devoted to this favorite occupation.

The botanical works of Mr. Schweinitz indicate, not only great industry and perseverance in the collection of facts, but a judicious *method* in the prosecution of his labours. The synoptical tables attached to his several monographs, are evidences of the importance attributed to this feature in his productions. His analytical table to facilitate the determination of the Carices, affords another striking illustration of the benefit to be derived from a systematic pursuit of scientific studies. It contains an abstract view of 110 antithetical positions of parts, which mark the species of that extensive and difficult genus; and since this analytical table was doubtless the result, in part, of his own inductive studies, it proves that of those studies he was able to make a legitimate and profitable use, by arranging all his facts under appropriate, general heads, and to point out to future inquirers, in what paths to pursue the labours, which himself has so happily followed. His monograph of the Carices of North America, soon after published, gave proof of the utility of this methodical arrangement.

Among the most extensive, and, in a scientific point of view, the most important of his labours, are those which relate to the Fungi. Four of his principal performances refer to this abstruse branch of botany.

Three of them, the "Conspectus Fungorum Lusitaniae," the "Synopsis Fungorum Carolinae Superioris," and the "Synopsis Fungorum in America Boreali Media Degentium," are all, as their titles import, written in the Latin language. The mere reader of English may, perhaps, be ready to ask whether this was not a mark of scholastic vanity, thus to seal against the majority of readers, the very books which profess to make known his discoveries. To this, we may answer promptly and decidedly in the negative. For, if written either in German or in English, the two other languages with which he was, probably, the most familiar, they must have been sealed against a far greater number of those who are ever likely to seek instruction from their pages. A few inquisitive botanists are found in every quarter

\*For the purpose of establishing a branch of the "United Brethren's" community in Indiana.



of the globe, and the medium of communication between them is the same as that of the whole scientific world was three centuries ago. It was to these that Schweinitz was obliged, from the nature of the case, to address himself, and to these he spoke in a language which they all, doubtless, understood.

It may, in the next place, appear singular that so great a part of his exertions should have been devoted to the cryptogamous races. But to this preference he had, by birthright, a sort of hereditary, or derivative national title, since it is to *German*, Danish, and Swedish botanists\* that we owe by far the greater part of our knowledge of that difficult department. In fact, German botany, like German metaphysics appears to deem the obvious, every-day phenomena of a science, utterly unworthy of her regards. Phenogamous plants want the charm of an adequate mystery; things are too apparent to the senses; lie too much upon the surface; there is nothing of the spirit of adventure; nothing of the Giant of the Brocken to be encountered.

But, set before her a turf studded with mosses—a clump of twenty different sea weeds, a bundle of a hundred strange ferns, a basket of innumerable new fungous parasites; or, in defect of any thing more exquisite, a load of nameless sedges and grasses, and there is at once a banquet for her keen appetite to revel on,—a truly "*dignus iudice nodus*."

And who shall venture to accuse this far reaching and deep searching propensity of the northern botanists?—Certainly not one who has never entered beyond the outer gate of this chosen sanctuary of nature.

It is probable that even the greater number of professed botanists are little attentive to the wide extension given by nature to the cryptogamic races. Fungi, as well as the other classes in this great division of her works, are spread over almost every sort of vegetable matter, whether in the dead or the living state. They are to be met with in wells, mines and caverns, as well as in the garden, the field, and the farm yard; on decayed branches, stumps and roots of trees; on the bark, beneath the epidermis, and amidst the inner coats of growing timber; on the petioles and nerves of dry leaves; on the ground, amidst dense forests—lawns, marshes and meadows. One inhabits only the decaying hoofs of horses and horns of oxen, while another is no where to be met with, except on the bones and feathers from a particular species of raven. Among trees, the fir, the poplar, the oak and the birch, are peculiarly marked by the variety and abundance of these parasitic genera.—They not unfrequently occur in the interior of the trunks of timber trees. Mr. Schweinitz had in his collection, fine specimens of the *Dematium aluta*, taken out of the ships of war built by our government, on Lake Erie, where, in a few years, he remarks, "this little fungulous enemy completely destroyed that fleet which had so signally vanquished the armament of Britain."

It was remarked by the cynic of old, when a pampered mouse had perched himself on a corner of his table, awaiting the eleemosynary crumb which the habit of intimacy between the two individuals had taught him to expect, that even Diogenes, too, had his *parasites*.—If it be true, that all men, however humble, have their appropriate adherents—how much more so, when we descend to the inferior orders of creation? Scarcely, it is believed, can a species of animals, whether they

inhabit air, earth, or ocean;—whether they proudly soar or lowly creep, be found, unattended by those which occupy, in regard to them, a parasitic character.

It will be remembered that in one of the papers of our late lamented Sax, the parasitic insect, which feeds upon the Hessian fly is described. The study of cryptogamic botany makes known innumerable examples of the same general fact, in regard to that great department of nature's works.

In the synopsis of the "*Fungi of Lusatia*," the authors have, with becoming spirit, discarded the too frequent practice of writers in changing the names of plants, and adopting new synonyms, merely, as would often appear, to compel future naturalists to cite their own names in connection with the trivial specific appellations which they choose to affix to well known objects. This course they avoided under the conviction that natural history had received, and was daily receiving, great detriment from the accumulation and confusion of these synonyms.

They have, moreover, assiduously avoided superfluous repetitions of the names of classes, orders, genera, and species, and given a true *synopsis* of the department which they professed to treat. They have followed the steps of Persoon, sensible that though his method may be in some points defective, it is better not to depart from so able a guide; for, they remark, "it is well known how much easier it is to find fault with our neighbour's house than to build a better and more commodious one ourselves." "A solid basis to this department of botanical science," they add, "must be laid, not on a sandy foundation, on the varying freaks and fancies of the mind, but on a perpetual day and night employment of microscopic observation, a diligent and oft repeated examination of the whole history of the fungous tribes, a careful perusal of authors, a comparison of their respective synonyms, and above all, by the observation of living nature herself, as she unfolds her rich abundance in the recesses of forests, lawns and marshes; an observation which must be continued from day to day, and from year to year, if we would reap the true reward of our labours."

At the period when Schweinitz and Albertini wrote, there had been recently broached, in some of the German journals, particularly Voight's Magazine, certain monstrous hypotheses, concerning the very nature of the fungi, and "which one could scarcely credit his senses in perusing;"—hypotheses which ascribed the existence of several species of these plants to mutations of form, and to a diseased condition of one and the same species of Zoophyta; alleging that the *Tubulina fragiformis* was nothing more than the progeny of the *Phallus immodicus*, which, growing old, at length became metamorphosed into the *Lichen paschalis*; thus, in the mere wantonness of authorship, confounding, with one scrawl of the pen, two great classes of the vegetable world, and blending both into the animal kingdom. This was to make vegetable life, indeed, Protean. The like indiscriminating heedlessness had led the writer to assure his readers that a fungus discovered by Hoffman, in the *Trichoderma roseum*, furnished with curious and delicate little filaments, was nothing more than a zoophyte, with six arms. Against these, and many similar heresies and hallucinations, the authors do not fail to caution their readers.

This work was prepared under several disadvantages. The German writers on cryptogamia had, it is true, been found of great service in determining nice and difficult questions, and to them Albertini and Schweinitz repeatedly acknowledged their obligations; but they had to lament that their remoteness from the richer treasures of scientific truth, the vast libraries of metropolitan cities, did not allow them to consult the productions of Bulliard, Sowerby, Bolton, Shæffer, Mitchel, Batsch, and others. At a subsequent period, when treating of the fungi of America, Mr. Schweinitz was

\*The botanist will readily recall to mind, in addition to the names of Schweinitz and Muhlenburg, among ourselves, those of Weber, Schwaegrichen, Roth, Nees, Fries, Link, Kunz, Schrader, Tode, Hoffman, Hedwig, Withering, Gartner, Schæffer, Batsch, Wahlenberg, Schkuhr, Schwartz, and many others, as illustrations, more or less apposite, of our position.

† *Onygena equina*,

‡ *Onygena corvina*.

enabled to profit by the contemporary labours of those whom he is pleased to term the coryphaei of mycological science, such as Fries, Mees, Link and Kunz, and he then takes occasion to remark, that all the genera described by them are likewise found in America, and that indeed but few species are known in Europe, (except those parasitic fungi which belong to a matrix not here produced,) but what are equally the products of both continents. This seemed conclusively to refute the notion that fungous forms are the mere fortuitous generation of accidental causes, and incapable of definite classification.

It is not, perhaps, among the least interesting and creditable circumstance connected with the publication of this work, that the twelve plates containing figures of ninety-three new species of fungi were drawn, engraved, and coloured by the hands of Mr. Schweinitz himself. We are assured, by one who was at that period his pupil, that he "recollects the untiring research with which our departed friend, amidst the various arduous duties of his office, (that of tutor at Nietky,) pursued his favorite study, and the labour bestowed by his own hands on the coloured plates of the well known "*Synopsis Fungorum*." The modesty with which the plates are submitted to the public, marks, in a distinct manner, both the meritorious character of the man, and the style of his Latin composition:

"*Si quis severior tabularum nostrarum contemplator, nonnulla in iis, nec fortasse pauca, desideraverit—eum, ne prima sese oculis excusoria linocinia, unico scientiae amore duce et auspice tentata, coram habere obliviscatur, rogatum velimus.*"

One might hazard the opinion, that even in more recent works of natural history, many far less creditable specimens of the same art have found place, without being able to urge the apology that they were the first efforts of a tire, and without the commendatory plea that the sole love of science had guided and ushered them into public view.

In his paper on the genus *Viola*, Mr. Schweinitz makes the interesting remark, that of all the American species of violet, thirty or more in number, not one has an identical counterpart in any European species; that not more than one of the latter appears to have become naturalized in America; and that while Europe possesses about twenty species of this interesting genus, America has, as above stated, already numbered thirty, and probably may yet add others from future exploration of her extensive northern regions.

In his descriptions of new American species of the genus *Spheria*, contained in the fifth volume of the *Journal of the Academy*, Mr. Schweinitz states, that of 528 species which Dr. Fries describes, 330 had been observed by himself in America, and that besides what Fries had incorporated in his general abridgement, the new species amounted to 112, making the whole number then known, 640; that the whole number of American fungi, then observed, (1825,) fell little short of 2000. He adds, "I am fully persuaded, as many more remain undiscovered. Our immense forests, humid climate, and variety of high rank vegetable productions, may well warrant this conclusion."

In this paper he describes twenty new species of American *Spheria*, respecting which he remarks, that very few, peculiar to America, spring directly from the soil, that is, from vegetable mould,—for none, in fact, spring solely from rocks, or their unvegetalized debris. Nearly all the fungi, peculiar to America, are parasitic, and this, considering the vast number of peculiar plants and trees of the higher orders, found in our country, may still account for the almost incredible multitude of fungous forms, belonging exclusively to this continent.

His last published performance contains the names of 3098 species of North American fungi, of which more than 1200 are the fruits of Mr. Schweinitz' own labours, embracing, of course, the species previously described

in his paper on the *Spheria* and those included in his Carolina synopsis. If to these, we add those plants described in his other performances, we have an aggregate of nearly 1400 new species added to the amount of botanical science, by the talents and industry of a single individual; a number constituting no contemptible portion of the whole amount of human knowledge on this subject.\*

At the decease of Mr. Schweinitz, the whole of his rich collection passed, by bequest, into the possession of this institution.

Independent of the fungi and other cryptogamous specimens, not yet arranged, or even fully examined since their arrival, the herbarium thus bequeathed to the Academy by our deceased fellow member, contains about twenty three thousand species of plants, either collected by himself, or procured through the agency of his numerous and valuable correspondents. Among the latter, the examination has shown that many names, high in science, are included.

Of European plants, many were furnished by Dr. Schwaegrichen, of Liepsic, author of the *Prodromus Historiae Muscorum Hepaticorum*, and already mentioned as the editor of one of Mr. Schweinitz' publications; others, by Dr. Steudel, author of the *Nomenclator Botanicus*; some were obtained from his attentive and valued correspondent Dr. Zeyher, and others from the well known naturalist, M. Brongniart, of Paris.

From M. Ledebour author of the *Flora Altaica*, Mr. Schweinitz received most valuable contributions of Altaian and Siberian plants, originally discovered by that traveller in his Asiatic journeys, and described in the work just mentioned. From Dr. Wallick, superintendent of the Botanic Garden at Calcutta, and editor of an edition of the *Flora India*, he obtained numerous species of the plants of India, particularly of Napaul.

From M. Ludwig, through the kindness of his friends Leutner and Saynisch he became possessed of the rare and interesting species from South Africa.

By W. J. Hooker, Esq. of Glasgow, author of a *Monograph of the Jungermanniae* and the *Flora Scotica*, he was furnished, among others, with specimens of those hardy tribes of plants, which had been brought by Captain Parry, from the polar regions of North America. James Reed, Esq. of this city supplied the plants of China.

A very valuable collection from Labrador, was presented by his friend, Kohlmeister, Moravian missionary at Nain, in that country.

The labours of Mr. Martius enabled him to send to the herbarium of our deceased benefactor, the botanical treasures of Brazil.

Our worthy correspondent, Dr. Hering, furnished those which adorn the fertile plains of Surinam, and Major Leconte, of the United States' army, placed in his hands an important collection of the plants of Georgia. Most of the existing botanists of our country had, also, manifested their esteem by transmitting to their respected fellow labourer, some of the fruits of their industry and research. But Mr. Schweinitz did not rely solely on correspondence and exchanges, for the augmentation of his herbarium.

After the decease of our late Vice President, Zachaeus Collins, Esq., Mr. Schweinitz became the purchaser, for a valuable consideration, of that part of his herbarium known as the *Baldwin collection*, containing plants from Florida, Brazil, and Buenos Ayres, among which he found more than three thousand species, not before in his own herbarium, and of these, more than one-half, it is believed, have never yet been described in any publication.

Thus, through the liberality of the deceased member whom we now commemorate, the donations which, in his life time, Mr. Collins had bestowed on the museum

\*The whole number of species at present known, has been estimated at 60,000.

of our institution, are once more united to his other most important botanical treasure.

The examination and arrangement of these new plants constituted some of the last scientific labours of Mr. S. and he derived from the employment, such satisfaction as to make him, for a time, forget the bodily suffering and the mental depression under which his frame, at length, gave way.

Increased by all these rich and varied additions, the botanical department of our museum having previously acquired the entire collection of Mr. Nuttall,\* besides valuable contributions from our president, Mr. MacIure, and others, now embraces about 28,000 different species of plants; more than three-quarters of which are, as we have seen, due to the industry and liberality of a single individual.

The whole is now arranged† after the neat and judicious manner of Mr. Schweinitz, into scientific order, on a plan to embrace the previous collection of the Academy, secured, as far as practicable, from the depredations of insects, and easy of access for the purposes of research and comparison. But the direct legacy of Mr. Schweinitz is, probably, not the only favour which is due to his scientific character and labours. It has been remarked that our institution owes to members of his community, a greater portion of its valuable collections in different departments, than to any other equal number of individuals, and it is reasonable to suppose that his example, as a cultivator of science, has, in no small degree, determined the preference of those over whom he so long, and so beneficially, exercised an influence.

Such, may I repeat, was the life, and such the labours of our departed associate; a life which humanity may contemplate with a calm delight; labours which science may review with a noble satisfaction.

With a laudable emulation of all the excellencies which had, before his own day, given lustre to his name, and a clear perception of the truth that the virtue of ancestors sheds *no honour* on any but the *virtuous* of their offspring; with a zeal for the acquisition of knowledge, which, springing from an innate law of his being, afforded to his understanding that pure gratification, which, by another law of his being, knowledge alone could impart; with a benevolent desire to communicate whatever of delight the investigations of science and literature had infused into his own heart; with a love for the beauties of nature, imbibed almost in infancy, and which grew with the increase of every faculty, and lasted to the closing period of his too short career; with a purity of mind and heart which made every truth of nature a lesson in virtue; with an intrepidity in the prosecution of scientific enterprises which led him out of beaten tracks, and taught him to find pleasure in threading those very labyrinths from which most other travellers in the paths of knowledge, shrink in despair; with a clearness of method which enabled him to communicate to others the full advantage of his own discoveries in these many haunts of nature; with a candour and fairness which never merged the man of honour in an effort unduly to elevate the man of science; never sought, by questionable artifices, to obscure or to hide the just reputation of others; with a benevolence of

disposition which enabled him to find every where, in works of creation, the traces of that beneficence, which, in his *professional* character, it was his highest pleasure to pourtray, and his most ardent desire to imitate; with a cheerfulness of disposition, and a suavity of manners, which rendered him an object of deep affection in every social relation; with a rectitude of purpose which won the confidence, while it formed the character of youth,—and secured the gratitude, while it watched over the interests of age; with an assiduity which encountered the fatigues of many voyages, not always without peril, in the service of that cause to which he was devoted; with a patient continuance in years of toilsome effort, to extend, by precept and example, the benign system of practical goodness and spiritual liberality which ever shone in his life and actions; with a distinct perception that the treasures accumulated in a life devoted to science, are not for individual possession, but, in order to produce their due effect, must, in some degree, be imparted as a common inheritance to the heirs of his genius and spirit; with these and similar characters which time might fail us to enumerate, did our deceased fellow labourer fill up the measure of his usefulness, and win for himself a title to the lasting gratitude of his fellow beings.

We should not dare to undertake the delicate task of assuaging that grief which the loss of so much merit must have occasioned. It is, fortunately, to be drawn from a source more elevated than our feeble voice:—The remembrances of a well spent life, are to the bereaved heart, assurances more strong and consoling than the loftiest eulogies of man,—and there is no support to the virtue of orphanage more sure than the noble example of that personal excellence to which the orphan's memory is taught, habitually, to revert.—Happily for the domestic circle of our departed associate, they need not desire a firmer guarantee for their hopes, nor a brighter example for their imitation, than are to be found in the character of LEWIS DAVID VON SCHWEINITZ.

The following are the full titles of Mr. Schweinitz's scientific publications, as far as we have been able to collect them. Of the other productions of his pen, many of which were published in foreign countries, and some of which still remain in manuscript, we have not been so fortunate as to obtain copies in time for this memoir:

1. *Conspectus Fungorum in Lusitania supericris agro Niskiesi crescentium e methodo Persooniana. Cum tabulis XII. æcis pictis, species novas XCIII. sistentibus.*

Auctoriibus J. B. DE ALBERTINI,  
L. D. DE SCHWEINITZ.  
(*Sumptibus Kumerianis.*)

*Lipsiæ, 1805.*

2. *Synopsis Fungorum Carolinae superioris secundum observationes Ludovici Davidis de Schweinitz, Soc. Nat. Cur. Lips. Sodalis, ect.*

Edita a D. F. Schwarzgrichen.  
*E commentariis societatis naturæ curiosorum Lipsiensis excerpta.* (*No date.*)

3. *Specimen Floræ Americæ Septentrionalis Cryptogamicæ, sistens muscos hepaticos hucusque in Am. Sep. observatos, or*

*Specimen of a systematic arrangement and description of the cryptogamous plants of North America, comprising a diagnostic description of all the hepatic mosses hitherto observed in North America, with ample descriptions of a number of new species.*

By LEWIS D. DE SCHWEINITZ, P. D.  
*Raleigh, N. C. 1821.*

\* The *American* plants of Mr. Nuttall were, in part, a donation from that gentleman, and, in part, obtained by a subscription among several public spirited members of the Academy. For his *exoties*, amounting to several thousands, we are wholly indebted to the liberality of Mr. N.

† The Academy owes to the indefatigable labour of the Chairman of its Botanical Committee, Dr. Charles Pickering, the prompt execution of this task, and the compiler of this notice is happy to acknowledge his obligation to the same gentleman for many of the facts above stated in regard to the herbarium.

4. Attempt of a monography of the Linnæan Genus *Viola*, comprising all the species hitherto observed in North America. By Lewis D. de Schweinitz.

Communicated [to Prof. Silliman,] July, 1821.

5. A Catalogue of Plants, collected in the North-western Territory, by Mr. Thomas Say, in the year 1823. By Lewis D. Schweinitz.

Philada. 1824.

6. Analytical table, to facilitate the determination of the hitherto observed North American species of the genus *Carex*. By Lewis D. de Schweinitz.

Read [at the New York Lyceum of Nat. Hist.] Dec. 8, 1823.

7. List of the rarer plants found near Easton, Pennsylvania.

Communicated [to Prof. Silliman] through Mr. John Finch. 1824.

8. A Monograph of the North American species of the genus *Carex*.

By Lewis D. de Schweinitz and John Torrey.

Read [before the New York Lyceum of Nat. Hist.] Dec. 13, 1824. Edited by Dr. Torrey.

9. Description of a number of new American species of *Sphæria*.

Read [before the Acad. of Nat. Sciences of Philad.] Feb. 15, 1825.

10. Synopsis Fungorum in America Boreali media degentium.

Communicated [to the Amer. Phil. Soc. of Philad.] April 15, 1831.

From the Lancaster Union.

#### MR. MILLS' ASCENT FROM LANCASTER.

On the 30th of May, at 27 minutes past 3, P. M. in the midst of a crowded and highly respectable assemblage of spectators, I made my second ascent from Lancaster. The wind blew freshly from the N. W. so as to dash my Balloon against the fence of the enclosure, and break a large silken oar, designed to facilitate ascent and descent. Drawn back by the kind activity of friends, to the opposite side of the Amphitheatre, with some difficulty I rose high enough to clear every obstacle.

Just after crossing the Conestoga creek, being still near the earth, on account of the rapid horizontal movement of my balloon, I hailed a number of persons, and threw down some papers, among which was the "*Lancaster Union*."

About 12 miles from Lancaster, I had almost reached the clouds, and could see the long line of the Susquehanna, and the towns of Columbia and Marietta. The extensive view from my then position, was made more magnificent by the number and variety of the sun-bright spots which stood out in peculiar contrast with the general shadowing. At 19 minutes past 4, the balloon entered a mass of clouds, and a darkness equal to decided twilight immediately followed—the mist was not apparently humid, but so dense as almost to conceal from my view the balloon itself. Here and there vacuities in the cloudy strata displayed the appearance of immense caverns, with firm walls and ceilings. This part of my voyage was really romantic and novel, and occupied the long period of 13 minutes; so that the stratum of mist must have been very thick, perhaps not less than half a mile.

A sudden burst of sun-shine, the curling up of the white surface through which I burst, and the vast mountains of white vapor standing still at a distance, gave a stirring impulse to the lately darkened voyager. Such a change requires to be seen, to be at all appreciated.

I had scarcely time to note the singular scenery when

at a distance scarcely more than 20 yards above the convoluted surface, the balloon became violently agitated, swung to and fro, rotated rapidly, and immediately took a direction opposite to the old one. The suddenness and violence of the motion shewed there were opposite currents of air in actual contact, and that a strong electrical excitation was thus produced, which a subsequent phenomenon clearly demonstrated. Having risen considerably above the clouds, at seventeen minutes before five, I let out gas, and commenced my descent; but finding myself falling too rapidly, I discharged some light sand to lighten the balloon. Just as I entered the clouds again, I was surprised to find the liberated sand falling on my head, and on every thing in my car. This I since ascribed to the attraction and subsequent repulsion of the sand by a highly electrified balloon, just as happens to light bodies near an excited prime conductor of an electrical machine, as I have before passed through clouds without observing such an event, I am disposed to believe, that the friction of the two great opposite currents of air on each other, excited the balloon. There was nothing remarkable in the descent. I reached the earth in safety, landed 15 miles from Lancaster, on the farm of Messrs. Hopkins & Brooks, near the Conowingo Furnace, where I then let out the gas, folded my balloon, and was brought by Mr. Brooks, to Lancaster, which place I reached at 10 o'clock, P. M.

Just before ascending, some ladies presented rings, bracelets, lockets, &c. to be carried up to the clouds. They were restored after the voyage to their fair owners, who, no doubt, think them of high value on account of the danger they encountered.

JAMES MILLS.

#### THE PHILADELPHIA PENITENTIARY.

From Crawford's\* Report on the Penitentiaries of the United States.

In the year 1818, the Legislature of Pennsylvania resolved on the establishment of a penitentiary at Pittsburgh for the western division of the state. It was intended to enforce at this prison, solitary confinement without labour; but the building, on its completion, was found to be so ill-calculated for that object, that the design could not be executed. The convicts were, it is true, confined in separate cells; but they could and did freely communicate with each other. These facilities for corrupt intercourse were greatly promoted by the idleness to which they were subjected. The mischievous effects of this penitentiary became at length so obvious that the Legislature, in 1832, resolved on its re-construction on such a plan as would insure strict solitude during the hours of labor, as well as at night. This new prison is just completed. Undismayed by the failure of their efforts at Pittsburgh, the Legislature determined in 1821, on the erection of another penitentiary in Philadelphia for the eastern division of the State. The progress of this building was, however, for some time arrested by a difference of opinion which prevailed respecting the nature of the discipline, to be enforced. A highly respectable party who had deeply interested themselves in the erection of the penitentiary, warmly advocated the infliction of solitary imprisonment without labor. Inquiry was deemed necessary, and commissioners were appointed to visit other gaols, and report on the most eligible plan. These gentlemen recommended that the convicts should be employed in association during the day, and be confined apart at night. Opinions so opposite demanding still further consideration, the Legislature determined upon the middle course of solitude by day and night, accompanied by labor. The Eastern Penitentiary was ac-

\* Mr. Crawford is one of the late British Commissioners to this country.

cordingly proceeded with; and a part being completed, prisoners were admitted into it in July, 1829.

This penitentiary is situated about a mile from the city of Philadelphia. The site occupies about 12 acres. It is built of stone, and surrounded by a wall 30 feet in height. Every room is vaulted and fire-proof. At each angle of the boundary wall is a tower for the purpose of overlooking the establishment. In the centre is a circular building, or observatory, from which several corridors radiate: they are under complete inspection. The cells are ranged on each side of the corridors, in the wall of which is a small aperture and iron door in each cell: through this aperture the meals of the prisoner are handed to him without his seeing the officer, and he may at all times be thus inspected without his knowledge. Other openings are provided for the purposes of ventilation and warmth. A privy is constructed in each cell in such a manner as to preserve the purity of the atmosphere, and prevent the possibility of communication from cell to cell. Heated air is conducted by flues from stoves under the corridors. In the arched ceiling of each cell is a window for the admission of light.—The cells are 11 feet 9 inches long, 7 feet 6 inches wide, and 16 feet high to the top of the arched ceiling. The cells on the ground floor have double doors leading into a yard, 18 feet by 8 feet, in which the convict is allowed to take exercise for an hour daily. The walls of the yard are 11 feet high.—Prisoners are not allowed to walk at the same time in adjoining yards; and when in the yards are inspected by a watchman placed for that purpose in the tower of the observatory. At present but three corridors are completed: the others which are now erecting differ in some of their arrangements from those originally built. The new cells below, as well as in the upper floor, have doors opening into the corridors. These cells vary also in their dimensions, being three feet longer than the others. The prisoners in the upper cells are not allowed to go at any time into the open air.—This rule had been only seven months in operation at the period of my visit. No inconvenience had at that time been found to result from the arrangement. On the admission of a convict, he is taken into an office at the entrance of the penitentiary, and subjected to the usual course of examination. His person is cleansed, and he is clothed in a uniform. He is then blindfolded and conducted to his cell. On his way thither he is for a short time detained in the observatory, where he is admonished by the warden, as to the necessity of implicit obedience to the regulations. On arriving in his cell the hood is removed, and he is left alone. There he may remain for years, perhaps for life, without seeing any human being but the inspectors, the warden, and his officers, and perhaps, occasionally, one of the official visitors of the prison. For the first day or two the convict is not allowed to have even a Bible, nor is any employment given him for at least a week, a period during which he is the object of the warden's special observation. The prisoner soon petitions for an occupation. It is not, however, until a sabbath appears to have effectually subdued him that employment of any kind is introduced into his cell. Under such circumstances labour is regarded as a great alleviation; and such is the industry manifested, that with few exceptions, has it been necessary to assign tasks. Several salutary provisions are made by the Legislature against the abuse of the power vested in the warden and his officers. The inspectors are required to visit the prison at least twice in the week, and on those occasions to speak to each prisoner, and to listen to any complaint that may be made of oppression or misconduct. Neither the warden nor any of his assistants are to be present at those interviews, unless their attendance be desired. The physician is required to visit the infirmary daily, and to attend at the penitentiary twice in every week, for the purpose of inquiring into the mental as well as bodily state of every prisoner.

The official visitors appointed by the Legislature are the Governor of the State, the Speaker and members of the Senate, the Speaker and members of the House of Representatives, the Secretary of the State, the Judges of the Supreme Court, the Attorney General and his deputies, the President and associate Judges of the Court in the State, the Mayor and Recorder of the cities of Philadelphia, Lancaster, and Pittsburg, the Commissioners and Sheriffs of the several counties, and the acting Committee of the "Philadelphia Society for the Alleviation of the Miseries of Public Prisons." No person but an official visitor can have any communication with a prisoner, unless under special circumstances: nor is a visitor permitted to deliver or to receive from a convict any letter or message, or to supply him with any article, under the penalty of 100 dollars. Such are the general arrangements of this penitentiary. There are, however, deviations from the rules which I have described in regard to convicts who are employed at trades which cannot be conveniently carried on in a cell. Those who are employed as blacksmiths, carpenters, &c. are allowed to leave their cells and work separately in small shops, in which they are locked up, or they are associated in such cases with an artificer not a prisoner; but the greatest care is observed both during the hours of work, and when going to and returning from the shops, to prevent any one convict from seeing another. This departure from the ordinary regulations, however it may be the means of increasing the number of employments in the prison, will, I fear, be found susceptible of abuse, and even calculated to promote escapes at a future period when the penitentiary may not have the benefit of that anxious care and unwearied vigilance which are exercised by the present warden.

Having had the unrestrained privilege of visiting the cells at all times, I have had many opportunities of conversing in private with a considerable number of the prisoners. Aware of the strong feeling which exists of the danger resulting from long periods of solitary confinement thus strictly enforced, my inquiries were carefully directed to the effects which it had introduced upon the health, mind, and character of the convict. I have uniformly found that the deterring influence is very great, and such as I believe belongs to no other system of gaol management; for although in large bodies, associated together, silence may by strict discipline be in a great measure maintained, prisoners thus debarred from speaking have inevitably recourse to other modes of communication. I do not wish it to be inferred that moral corruption can result from intercourse so limited, yet when men are day after day thrown into the society of each other, the irksomeness of imprisonment becomes impaired, and its terrors materially diminished. The Eastern Penitentiary imparts no such relief. Of the convicts with whom I conversed, many had been previously confined in the New York and other prisons, where corporal punishments were frequent, but these persons have declared that that discipline was less corrective than the restraints of continued solitude. When prisoners are associated it is extremely difficult to cut off all intercourse from without. The arrival of new and the discharge of other convicts form constant channels of communication. In the Eastern Penitentiary, the separation from the world is certain and complete. So strict is this seclusion, that I found, on conversing with the prisoners, that they were not aware of the existence of the cholera which had but a few months before prevailed in Philadelphia.\*

\* To their ignorance of the existence of the cholera may doubtless be ascribed in a great measure, their preservation from this disease, not a single convict having been attacked by it during the whole period that it prevailed in the city of Philadelphia, although the hospital for the reception of patients was in the neighbourhood of the prison. The powerful effect of alarm on the bodily system was singularly illustrated at this

The exclusion of all knowledge of their friends is severely felt. But although every allusion to their situation was accompanied by a strong sense of the punishment to which they were subjected, I could perceive no angry or vindictive feelings. I was indeed particularly struck by the mild and subdued spirit which seemed to pervade the temper of the convicts, and which is essentially promoted by reflection, solitude, and the absence of corporal punishment. The only offences in the Eastern Penitentiary which the prisoner can commit are idleness and wilful damage to the materials on which he is at work. On such occasions he is punished by the loss of employment, the diminution of his food, or close confinement in a darkened cell. The necessity for correction is extremely rare. There is not a whip nor are there any firearms within the walls of the prison.

Solitary imprisonment is not only an exemplary punishment, but a powerful agent in the reformation of morals. It inevitably tends to arrest the progress of corruption. In the silence of the cell contamination cannot be received or imparted. A sense of degradation cannot be excited by exposure, nor reformation checked by false shame. Day after day, with no companions but his thoughts, the convict is compelled to reflect and listen to the reproofs of conscience. He is led to dwell upon past errors, and to cherish whatever better feelings he may at any time have imbibed.—These circumstances are in the highest degree calculated to ameliorate the affections and reclaim the heart. The mind becomes open to the best impressions, and prepared for the reception of those truths and consolations which Christianity can alone impart. Instances have occurred in which prisoners have expressed their gratitude for the moral benefit which they have thus derived. If such effects are not more generally produced in the cells of the Eastern Penitentiary, the circumstance is to be ascribed, not to the system, but to the manner in which one of its most essential features has been neglected. The law authorizes the appointment of a chaplain or religious teacher, but makes no pecuniary provision for his support.—It is true that occasions occur, highly honourable to the parties, in which clergymen visit the penitentiary, and gratuitously afford their assistance by the performance of divine worship. These services are greatly appreciated by the prisoners.

In the impressive stillness of the cell, even the sound of the human voice is a relief, and few situations can be more favourable to the reception of religious truth. But valuable as are these services, however desultory, their benefits are but partial and temporary, and utterly inadequate as a substitute for a systematic and unremitted course of religious instruction. Convicts unable to read are left uneducated. These are vital defects, which can alone be remedied by the appointment of a resident clergyman, who shall not only regularly perform divine service on the Sunday, but devote himself daily to the visiting of the prisoners from cell to cell. It is but justice to the inspectors and warden to state, that they are alive to the importance of this evil, and that they have repeatedly expressed to the Legislature their conviction that while it is permitted to continue, the good effects of solitary imprisonment can never be fully developed. The regulation by which one prisoner is strictly prohibited from seeing another is peculiarly beneficial. It not only forms a material addition to the punishment, promotes security, and cuts off the possibility of all communication, but it extends great advantages to the individual on his dis-

charge. The propensity of convicts, on their liberation, to revive acquaintances formed in prison is too notorious. If any individual so situated be disposed to abandon his criminal habits, he is too often assailed by temptations from his late associates, and threatened by exposure. An instance of this kind was related to me of a convict who had manifested great contrition for his past life, and conducted himself so well as to obtain his pardon from the Walnut street prison. Having been re-committed, he was asked why he returned, he replied, "I intended to behave well, and I went for that purpose into the state of Ohio, where I hoped that my former character would be unknown, and I might set out anew in life. I got employment and was doing well, when unfortunately I one day met a man who had been a convict here at the same time as myself. I passed him, feigning not to know him: he followed me and said, 'I know and will expose you, so you need not expect to shun me. Its folly to set out to be honest. Come with me and drink, and we will talk over old affairs.' I could not escape from him: my spirits sunk in despair, and I went with him. The result you know." The seclusion of the Eastern Penitentiary removes this formidable obstacle to reformation. The convict, on leaving his cell, re-enters the world unknown by any of the former inmates of the prison.

Since the opening of the Eastern Penitentiary, no less than four insane persons and one idiot have been in confinement. Considering this circumstance to be of great importance, I felt it to be my duty to make especial inquiry into the cases of these individuals, and I beg to refer your Lordship to a letter in the appendix, addressed to me by the warden, in explanation of the early history and previous habits of these afflicted persons. The statements contained in that letter, and the inquiries which I made upon the spot, together with the opinions expressed in the reports of the physicians, leave no room to doubt that the prisoners in question had been subject to mental disorders before they were admitted, and that the disease was in no respect attributable to any peculiarity in the discipline of the penitentiary. It is the opinion of the physician that the health of the convicts generally is improved by the treatment they receive, although the average proportion of deaths may appear high while the whole number in confinement continues small.\* In the last year, however, the proportion was less than 1 per cent. The physician remarks that the discipline has the effect of rendering the frame less robust, but at the same time prevents the occurrence of much disease, to which persons of the class who generally become the inmates of a prison are usually subjected, either from exposure to weather or the indulgence of vicious habits.

It is expected that the cost of this penitentiary, when completed for the reception of 586 convicts, will amount to 550,000 dollars. A large sum, however, has been unwisely expended in decorations. Under all the disadvantages of a new establishment the earnings of the convicts have not hitherto equalled the amount incurred in their maintenance.† The plan which the inspectors pursue is to purchase the stock, and manufacture on the account of the state, in preference to letting out

\*The average of deaths during the four years in which the prison has been established is 3 1-5 per cent.—viz :

	No. of Prisoners.	Deaths.	Proportion.
In 1830	31	1	3 per cent.
1831	67	4	6 "
1832	91	4	4½ "
1833	123	1	½ "

period at the Massachusetts state prison. The chaplain having taken occasion one Sunday, to advert to the awful ravages of the cholera, most of the prisoners who composed his congregation were, on retiring to their cells, seized with a complaint which it was greatly feared would lead to, but which happily did not terminate in malignant cholera.

†The daily ration is as follows:—Morning: 1 lb. bread, (two-thirds rye, one-third Indian meal); 1 pint of coffee. Noon: 1 pint of soup; ½ lb. of beef, without bone (of which the soup is made); and potatoes. Evening: mush (a preparation of Indian meal), and a gill of molasses. There is no restriction in the quantity of potatoes and mush.

the labor by contract. On the first of December last, there were 152 males and two females in confinement, principally employed as weavers and shoemakers.\*—Some loss is sustained from the former, and the profit on the latter has been but small. In winter the men continue to work in their cells until 9 o'clock at night, by lamps. The warden is of opinion that the net profits of a prison in the United States, conducted on the plan of separate confinement will be greater than that resulting from a penitentiary on the principle of joint labor. In his last report he expresses his conviction that an individual should not be sentenced for any period short of two or even three years, twelve months not being sufficient to teach a trade, or to eradicate old and fix new habits.†

In regard to the moral effects which have hitherto resulted from the Eastern Penitentiary, it is impossible to adduce any strong evidence. The institution has been only four years in partial operation. It is at all times extremely difficult to arrive at any satisfactory test by which to judge of the moral efficacy of a prison.—The number of recommitments has been often dwelt upon in relation to this point; but although the return of an individual into confinement may be, as it too often unquestionably is, occasioned by the corruption of a gaol, the absence of such recommitments is no proof of the deterring or purifying effects of the imprisonment. Experience in England has furnished striking evidence in support of this fact, some of the best prisons having more recommitments than others, which are remarkably defective, owing to the former being situated amidst a dense population, where the inducements to commit crime are more powerful than in agricultural districts. But proofs are still more abundant in America, in which extraordinary facilities exist for travelling to great distances, and where convicts can, on their liberation, leave one state with the utmost ease to pursue their old habits in another. In my visits to the several penitentiaries I constantly met with prisoners who had been inmates of our gaols, the keepers of which were ignorant of their reconviction. Of 45 who have been discharged from the Eastern Penitentiary two only are known to be again in confinement. I am afraid, however, that such statements prove but little. No systematic inquiries are made after the discharged; and indeed such are the migratory habits of convicts in a widely-spread country like the United States, that it is impossible to trace a prisoner on his liberation. Neither is a diminution in the number of offences any criterion by which to form an accurate judgment on this important point, as many circumstances combine to produce or diminish crime quite unconnected with penal institutions. If crime be on the decrease in the eastern district of Pennsylvania,

the fact cannot be ascribed to the effect of the penitentiary without attributing the same results to a bad as to a good prison.

For four years prior to the erection of the penitentiary there was a diminution in the numbers annually sentenced to the Walnut-street prison, a most wretched place of confinement; while the number of commitments to the Pittsburgh Penitentiary remained stationary during the five years in which it was so notoriously defective, notwithstanding that a material increase of population had during that period taken place in the western division of the state.

Upon a careful review of every part of the Eastern Penitentiary, after seeing the whole and examining a considerable number of the individuals confined in it, I have no hesitation in declaring my conviction that its discipline is a safe and efficacious mode of prison management; that it has no unfavorable effect upon the mind or health; and that, with the addition of moral and religious instruction, in which this penitentiary is eminently deficient, solitary imprisonment, thus enforced, may be rendered powerfully instrumental not only in deterring but also in reclaiming the offender. To the merits of this penitentiary I have much pleasure in bearing favourable testimony. In doing so, however, it is but right to observe, that there is no peculiar novelty in the general features of the plan, nor any just ground for that claim to originality which some of its advocates have been induced to urge. The main principles of the system were in force in England, at the Gloucester Penitentiary, forty years ago; and whatever improvements may have been effected in Philadelphia on the plan then pursued, have already been known and practised in this kingdom. The Eastern Penitentiary is, in fact, with some trifling difference in its arrangements, but a counterpart of the Bridewell at Glasgow, a prison which was in operation five years before the erection of the prison in Philadelphia.

From the Advocate.

#### ALLEGHENYTOWN.

In strolling over to Alleghenytown, I was much surprised to find the improvement of that place, not having visited it for the last eight years. Manufactures of every description in active operation, and, to use the expression of my good old friend Crockett, every branch of business "going ahead" with alacrity I was struck with astonishment to find a very material improvement in a machine used by John Irwin, Esq., in his Rope Manufactory. I have had the pleasure of witnessing many contrivances with the application of steam, in Europe, and the neighborhood of our Atlantic cities; but the one now in operation in Alleghenytown far exceeds any thing of the kind I have seen. It is built on a decidedly improved principle, such a one as not only does honor to the inventor, who, by the by, I am glad to say is an American, but would, in my opinion, be looked upon in Europe, by the men of great genius, as a discovery of the most important character. Although I minutely examined it, and was curious enough to investigate the matter as minutely as is possible for one who has no pretension to mechanism, and yet I regret that I cannot explain the matter so fully as would give any conception to those who never had the pleasure of seeing it, but will endeavor to give some of the outlines, extracted from the page of memory. The rope yarns are reeled upon bobbins, placed in a stationary frame, passing through an iron plate with circular holes, increasing in size, which they term the gauge plate, running through a cast iron tube, fixing on to spindles in the frame of hooks, to a machine on the rail road. The power is applied to this machine, from one extremity of the walk to the other, with ropes, which they term an endless band. This band revolves round a drum, placed at the side of the moving car, and by the application of

\* The following are the numbers employed at the several trades:—

Weaving,	38
Warping, dying, winding, &c. in the cotton department,	21
Shoemaking,	52
Carpenters,	5
Cabinet maker,	1
Blacksmiths	5
Wheelright,	1
Tinman,	1
Stonecutter,	1
Cook,	1
Quilting bed covers,	1
Apothecary,	1
Making and mending clothes,	5
Cigar-making	1
Woolpickers	9
Washing clothes,	2
Without employment,	9

Total, 154

†The first year is occupied in teaching the prisoner, at a loss to the state.

another band, which is termed the ground rope, revolving around another drum, placed in the centre of the same car, passing on to a roller, which is placed at the end of the walk, on which the gauge plate is fixed.—The steam power is applied at the end of the walk, on which the gauge plate is fixed. The steam power is applied at the extreme end of the walk, which operates on the drum placed on the side of the car, thereby putting the whole in operation. As the car moves from the stationary frame towards the extreme end of the walk, the strands are formed, as they pass from the bobbin through the gauge plate. The car, if I mistake not is for the purpose of forming the strands of the rope to an equal size, when all the yarns, as I noticed, bore an equal strain. When the strands are sufficiently long to reach the extreme end of the walk, they are detached from the car on which they are formed, and attached to another car, of a similar construction, with a drum on the side; but none at the centre, as in the former.

Three strands are attached to a spindle, stationary, which is fixed to the breast work. When the power is applied, the car, being at the extreme end of the walk from which the engine is placed, moves closer to the breast work, as the rope is formed by the twisting. A man is placed with a conical piece of wood, which he moves along to the machine as the rope is completed. I was informed that a rope, the whole length of the walk, can be made from the yarn in the short space of twenty minutes, and with the manual labour of one man and a boy, when in the other modes of performing the same work, it would require eight hands, and take them about one and a half to two hours; likewise observe that the rope presents a more beautiful appearance, and is much stronger than that made in the former way. On inquiring who erected this improvement, I was informed that it was Mr. David Myers, of Philadelphia, who is the patentee. Too much praise cannot be bestowed to this gentleman, for his ingenuity as well as his active exertions, in placing in the western country so valuable a construction; thereby giving us an opportunity of exchanging a little more of our coal for the one thing needful.

A KENTUCKIAN.

### IMPORTANT TO EDITORS.

Ex parte Poulson in the case depending in the Circuit Court of the U. S., between Drew and Swift.

Motion for a Rule on Zachariah Poulson, Esq., Editor of the American Daily Advertiser, to shew cause why an attachment should not issue against him for a contempt of Court, in publishing the following article in his paper of the 12th ult.

**DREW, THE COUNTERFEITER.**—This notorious fellow, who was arrested some time since at Philadelphia, and lightened of about six thousand dollars of good money, has recently had the effrontery to bring a suit against the Mayor of that city to recover this amount of property. We believe that the Drews, father and son, were both arrested, but that the latter was liberated upon turning State's evidence, and that he has since turned upon his heels and made off—another person who was to have given testimony against Drew, has denied his belief in a future state of being, and thus become incapacitated for testifying. The elder Drew, thus seeing a clear field before him, set about recovering the \$6,000, and has brought on witnesses to prove that he was a man of wealth, and that it was no uncommon thing for him to have such an amount of property! The City Solicitor of Philadelphia, Mr. Olmstead, came down in the last boat, and the Mayor of this city, Mr. Gilman, together with several of our old inhabitants, have gone on to Philadelphia to give in their testimony concerning the Drews, who, we believe, originated in these parts.—*Bangor Whig.*

**JUDGE BALDWIN,** (delivering the opinion of the Court on the above case.) The following are the circumstances under which this motion is made.

This action was brought to the last October Term of this Court, and being regularly at issue, was ordered for trial on the 11th inst. when a jury was sworn, and the trial proceeded; it was resumed on the 12th, when Mr. Ingersoll, counsel for the Plaintiff, stated that he had a motion to submit to the Court, in relation to a publication which had appeared in Poulson's American Daily Advertiser of that morning.

Hugh Crimes being sworn, deposed that he had purchased at the office of Mr. Poulson, a paper produced and identified, containing the offensive publication, taken from a newspaper published at Bangor, in the state of Maine.

From the evidence given on the trial of the cause thus far, it is clear that the publication refers directly to the Plaintiff, and the cause of action which he has submitted to the Court and jury, and in a manner calculated to produce the worst effects upon the administration of justice, as well by the character of the paper, in which it appears, as the nature of the remarks upon the Plaintiff, his cause now trying, and the witnesses who appear in his behalf.

In the present stage of the cause, it would be improper for the Court to express any opinion, as to the truth or falsehood of the matter contained in the publication: that must be reserved, till all the evidence is heard and commented on by counsel, when it will be ascertained what are the facts of the case. These considerations can have no bearing upon the present application, against a person who is no party to the suit, and cannot be the subject of comment, without running the risk of pre-judging the rights of the contending parties. It is however, not only a duty to them, but to the public, to express the strongest disapprobation, of any out door interference with the administration of justice; be it in whatever mode it may, it cannot fail to embarrass or obstruct, if not defeat the regular course of judicial proceedings.

The supreme law of the land, has secured to every man a right of appealing to the law for the redress of any injury, of which he complains; has appointed tribunals to hear and determine upon their justice, and prescribed the modes of proceeding according to established rules of evidence and principles of law. The laws will have been enacted in vain, Courts of justice will become useless, and suitors be deprived of the benefits of resorting to them for redress, if it shall be their common fate, to be obliged to encounter the effect of publications of a description now before us, on the merits of their cause.

It is headed, "Drew, the counterfeiter." "This notorious fellow," "has had the effrontery to bring a suit," &c. and the language of the article is of a consistent character throughout; it cannot be too much reprobated, or the evil example too much feared, when it is suffered to appear in a paper highly respectable, conducted by a most estimable member of society.—Nor can any friend to the due administration of the law, and justice to the suitors in its Courts, look on the prevalence of such a practice, without the deepest regret; every good citizen should make the case his own, by supposing himself a plaintiff in a suit on trial by a jury, many if not all of whom have read a similar allusion to himself and case. He could appreciate the consequences, and decide whether it was such an interference with the cause of justice, as to require the interposition of the law for its prevention and punishment. What has been the fate of Mr. Drew, may be the fate of all other suitors; causes on trial in Court may be simultaneously tried in the public papers; the one conducted by established rules, evidence received only on oath, and the law applied by a responsible tribunal, the jury bound to listen in Court, only to the evidence, the counsel and the law; but out of Court, at liberty to



hear and read statements, respecting the case, made without regard to either. It would be but one short step more to take, and jurors would be tampered with at pleasure, when not in the box, and be liable to be assailed by any person who might please to attempt to benefit, or prejudice a suitor. The moral offence, or the pernicious effects, would be but little aggravated if done in open Court, or when the jury are deliberating on their verdict; let it be done there, or in the public papers, it is a violation of the legal and constitutional rights of those who appeal to the law for redress.

From its nature, it is necessary that the means of prevention should be prompt and summary, or the mischief will become consummated by delaying a remedy, which must be sought in the usual forms of law; that which is now asked is of this description, and the injury complained of is the most aggravated kind, though the cause of the re-publication be inadvertence, or the unconscientiousness of its impropriety. That is no matter of consideration in the present stage of this motion. The first inquiry, is into the jurisdiction of this Court to issue an attachment for contempt, for a publication relating to a suit on trial, or in any way pending before it.

On the 2d March, 1831, Congress passed "An act declaratory of the law concerning contempt of Court," the first section of which enacts "That the power of the several Courts of the United States, to issue attachments, and inflict summary punishment, for contempts of Court, shall not be construed to extend to any cases except misbehaviour of any person or persons in the presence of the said Courts, or so near thereto as to obstruct the administration of justice, the misbehaviour of any of the officers of the said Courts in their official transactions, and the disobedience or resistance by any officer of the said Courts, party, juror, witness, or any other person or persons, to any lawful writ, process, order, rule, decree, or command, of the said Courts." Pamphlet 1831. 99.

The history of this act, the time of its passage, its title and provisions must be considered together, in order to ascertain its meaning and true construction. It was enacted shortly after the acquittal of Judge Peck of Missouri, on an impeachment preferred against him for issuing an attachment against a member of the bar, for making a publication in relation to a suit which had been decided by that Judge. On the trial, the law of contempt was elaborately examined by the learned Managers of the House of Representatives, and the counsel for the Judge; it was not controverted that all Courts had power to attach any person, who should make a publication concerning a cause during its pendency, and all admitted its illegality, when done while the cause was actually on trial. It had too often been exercised to entertain the slightest doubt, that the Courts had power both by the common law, and the express terms of the judiciary act, Sect. 17, as declared by the Supreme Court, to protect their suitors by the process of attachment.

With this distinct knowledge and recognition of the existing law, it cannot be doubted, that the whole subject was within the view of the legislature; nor that they acted most advisedly on the law of contempts, intending to define in what cases, the summary power of the Courts should be exercised, and to confine it to the specified cases.

From the title and phraseology of the act, it would seem to have been their intention to declare, that it never existed in any other cases than those enumerated,—it is "A declaratory act" which is a declaration of what the law "was, is, and shall be hereafter taken," when put into the form usual in statutes, which operate to settle the law retrospectively. These words are not in this law, but there is an expression which is tantamount—"the power of the several Courts, &c. shall not be construed to extend," &c. which refers to the past, the

present, and the future, as a proviso or limitation to powers of the Courts, from whatever source derived repudiating their summary action, as effectually as if they had never been authorized.

As this is an inferior Court, within the provision of the constitution, it is created by the laws, with such powers only as Congress has deemed it proper to confer, among which is this, "and to punish by fine or imprisonment at the discretion of said Courts, all contempts of authority in any cause, or hearing before the same." 1, Laws U. S. 63, act of 1789.

The act of 1831 must be taken to be the declared construction of this, and all other laws, limiting its operation in the manner prescribed, and as generally considered, Congress is to this Court what the constitution is to the Supreme Court, their acts must be construed on the same principles and operate as constitutional amendments which is to give such construction to the original act, as if the jurisdiction had never been given.

The third article of the constitution, extends the judicial power to controversies between a state and citizens of other states, a state and foreign states, citizens or subjects; suits of this description were brought and sustained till the adoption of the eleventh amendment, which declared, that "The judicial power of the United States shall not be construed to extend," to such cases. This was held by the Supreme Court to have a retrospective effect, annulling all jurisdiction over such cases past, present, or future. 5 Dall. 382, 6. Wh. 405. 8. 9. Wh. 850. 8.

The same effect must be given to this act, so as to make it what it evidently intended to be, a prohibition of the exercise of summary jurisdiction over contempts, excepting only such cases as are defined; in its prospective operation, its terms are peremptory, admitting of no construction, which can bring the present application within the exception, without doing violence to its plain meaning.

There can be no doubt of the constructional power of Congress, to act upon this subject, as far as respects own Courts; it is no invasion of the rights of a suitor to bring or defend a suit, or in any way affect his legal remedy, in the ordinary course of justice. It is in the discretion of the legislative power, to confer upon Courts a summary jurisdiction to protect their suitors, or itself, by summary process, or to deny it; it has been thought proper to do the latter, in language too plain to doubt of the meaning of the law, or if it could be doubted by any ordinary rule of construction, the occasion and circumstances of its enactment, would most effectually remove them.

It would ill become any Court of the United States, to make a struggle to retain any summary power, the exercise of which is manifestly contrary to the declared will of the legislative power; it is not like a case, where the right of property, or personal liberty, is intended to be effected by a law, which the Court would construe very strictly to save a right, granted or secured by any former law. Neither is it proper to arraign the wisdom, or justice of a law, to which a Court is bound to submit, nor to make an effort to move in relation to a matter, when there is an insuperable bar to any efficient action.

The law prohibits the issuing of an attachment, except in certain cases, of which the present is not one; it would, therefore, be not only utterly useless, but place the Court in a position beneath contempt, to grant a rule to show cause, why an attachment should not issue, when an exhibition of the act of 1831, would shew most conclusive cause. The Court is disarmed, in relation to the press, it can neither protect itself, or its suitors, libels may be published upon either without stint, the merits of a cause depending for trial, or judgment, may be discussed at pleasure, any thing may be said to jurors through the press, the most wilful misrepresentations, made of judicial proceedings, and any improper

mode of influencing the decisions of causes by out of door influence, practiced with impunity.

The second section of the same law provides, "that if any person or persons shall corruptly, or by threats, or force, endeavor to influence, intimidate or impede any juror, witness or officer in any Court of the United States in the discharge of his duty, or shall corruptly, or by threat, or force, obstruct or impede, or endeavor to obstruct or impede, the due administration of justice therein, every person or persons so offending shall be liable to prosecution therefor, by indictment," &c.

This provision, is in further confirmation of the view taken of the first section, it is a clear indication of the meaning of the law, that the misbehavior which may still be punished in a summary manner, does not refer to those acts which subject a party to an indictment, to construe it otherwise, would be to authorize accumulative punishment, for the same offence.

Taking the two sections in connection, the law admits of only one construction; the first alludes to that kind of misbehavior, which is calculated to disturb the order of the Court, such as noise, tumultuous, or disorderly behavior, either in, or so near to it, as to prevent its proceeding in the orderly despatch of its business. Not to any attempt to influence, intimidate, or impede, a juror, witness, or officer, in the discharge of his duty in any other manner whatever.

"The obstruction of the administration of justice" in the first section refers to that kind of behavior which actually disturbs the Court in the exercise of its functions while sitting; "the obstructing and impeding the administration of justice or the endeavor to do so, in the second refers to some act of corruption, to some force, or threat, by which it is done, or attempted to be done.

The endeavor to influence, intimidate, or impede, a witness, juror, or officer, in the discharge of his duty, is not punishable unless it is done corruptly, by force or threats; if done in any other manner, the law is silent, and this being a penal section, its provisions must be confined to the special cases, to which it extends.—5. Wh. 94. 5.

With this limitation on the summary jurisdiction of the Court, and the want of any legal provision, making it cognizable by indictment, we cannot say that the publication which is the ground of this motion, or any other, is or can be any disturbance of the business of the Court; the action of the press is noiseless, producing the same effects, far or near, it matters not.

The business of the Court is not interrupted, Judges and jurors can perform their functions on the bench, and in the box, by confining their attention to the law and evidence; disorder may be repressed in their presence, or hearing in a summary manner, but after an adjournment, no attachment can be issued for any thing done out of Court, during the intermission of its actual session.

Nor can any publication, which holds out no corrupt motive, to influence a juror, witness, or officer, or uses any threats to influence, intimidate, or impede him in his duty, be the subject of an indictment, consistently with this law; the press is free, if not set to work, in the presence of the Court, or so near as to interrupt its business. The law does not prohibit any endeavor, made to influence, or intimidate, a juror or witness, if corruption, force, or threats, are avoided; papers may be put into their pockets, conversation held with them, newspapers put into their hands, or statements made in relation to any matter in issue while they are actually impanelled. The Court may regret, and censure the practice, and perhaps admonish the party, who thus tampers with a juror or witness; but can neither punish the offence, or prevent its repetition. The law has tied their hands; the judges must be passive, it is not for them to be the first, to set the example of disobedience to the law, or attempt to evade plain enactments, most especially, not by the exercise of a forbidden jurisdiction.

These are all the powers with which Congress have entrusted the Courts of the United States, in insuring the fair administration of the laws by protecting themselves, jurors, witnesses and officers, from any improper interference with their respective duties, either by attachment or indictment.

For the protection of parties, for their security of a fair and impartial trial, and decision of their case, on the evidence and law which apply to it; to defend them against the efforts of the press, or of individuals, to excite a prejudice in the minds of a jury, to induce them to find a verdict on out of door statements, or other means of perverting their judgments, no legal check is interposed. It is left to the discretion of the conductors of public journals, and all others, to take whatever course their sense of public justice requires; to decide what is proper for jurors to hear and see, as guides to their verdict, whether it is the truth, or false, the effects of malice, prejudice, or from an excusable motive. Before the passage of the act of 1831, there was an acknowledged power resting in the sound, legal discretion of the Court to be exercised with caution, and from its nature attended with the highest responsibility of the judges, which did authorize them by the process of attachment, to prevent and punish the publication of articles like the one before us, and in this case it would have been the imperious duty of this Court, to have brought their powers into action, by granting this rule, if the Legislative power had not taken it away; how far it would have been proper to exercise them, would have depended on the cause shown on the rule, it was a clear prima case for some interference. But as Congress has deemed such a power, too dangerous to be entrusted to the discretion of judges on a motion, or of a Court and jury on an indictment, and have not thought it expedient to give a remedy to a party who has been injured by a publication, by authorizing him to bring a suit against the publisher for damages, we have no cognizance of the matter. The means of redress which had before existed, have been taken away without the substitution of any other; the law has left the propriety of such publications, to the discretion of the editors of public papers, after long experience of the effects of leaving it to the discretion of Courts, who assumed high responsibilities in its exercise, while none is imposed on those in whose breasts it now rests. It is the duty of the Court, to give the law its full operation; it has been enacted deliberately, with full knowledge not only of the course of the common law, the act of 1789, but of the statute law of Pennsylvania on the same subject, passed in 1809, which gives the injured party a double remedy for any injury complained of in a case like this. After taking from the Courts of the State the power to punish for contempts, except in certain cases, the law declares, that no publications out of Court, concerning any cause depending therein shall be construed into a contempt, &c. "but if such publication shall improperly tend to bias the minds of the public, the Court, the officers, jurors, witnesses, or any of them, on a question pending before the Court, every person feeling himself aggrieved by such publication, shall be at liberty either to proceed by indictment, or to bring an action at law, against the author, printer, publisher, or either of them, and recover thereupon such damages as a jury may think fit to award." 5 Smith 55.

Thus it appears, that while suitors in the State Courts, can be protected against publications like this, they are without protection in the federal Courts; the Legislature of the State deem it both an indictable and an actionable offence; the Legislature of the Union deem it neither a contempt of the law, of the Court, an offence to the public, or an injury to a party. The rule must be refused, but it is hoped that an appeal to the sense of justice, the magnanimity of the press, to abstain from any publication which shall improperly tend to bias the minds of the public, the Court, the

officers, jurors, or witnesses, in any cause while actually under trial before a jury in this Court may not be in vain. Its conductors should remember, that suitors stand unarmed, and defenceless before them; that the hands of the Court are manacled, that the law of 1831 has placed no arbiter between an editor, and a party to a trial, whose life, character, liberty, or property may be put in jeopardy, by the influence of the press. The law has taken from him the shield, and from the Court the sword, both must be submissive under the inflictions of the press, be they just or unjust; if it is conducted in the spirit of chivalry, and must be employed on cases depending in the Courts, let it be on suitors in State Courts, who can meet them in the panoply of the law, not on those who are helpless in this. It is neither manly or generous, to assail those who can make no resistance, or inflict an injury for which the sufferer is left without a remedy.

### MILITARY.

We annex the official report of the results of the recent election for Brigadier General, and other officers of the First Brigade. It will be perceived that Major Peter Fritz has been elected Brigadier General. It is said the election will be contested, on what grounds we are unable to say.—*Inquirer*.

#### FIRST BRIGADE.

Official return of an election for Brigadier General, Brigade Inspector, and for Field Officers of the several Regiments and corps of the first Brigade, First Division, Pennsylvania Militia, held June 1st, 1835, according to law.

Brigadier General—Major Peter Fritz.  
Brigade Inspector—Major Daniel Sharp.

#### *Ninth Regiment, P. M.*

Colonel—Thomas Logan.  
Lieut. Colonel—Ed. R. Badger.  
Major 1st Battalion—H. Risborough.  
Major 2d Battalion—Adam Shivers.

#### *Nineteenth Regiment, P. M.*

Colonel—Horace G. Browne.  
Lieut. Colonel—James Pidgeon.  
Major 1st Battalion—J. P. Barker.  
Major 2d Battalion—J. Fagan.

#### *Seventy-Second Regiment, P. M.*

Colonel—James Sloane.  
Lieut. Colonel—Adam Dialogue.  
Major 1st Battalion—Wm. Chrystler.  
Major 2d Battalion—Thomas Black.

#### *Seventy-fourth Regiment, P. M.*

Colonel—David Simpson.  
Lieut. Colonel—Wm. Hartman.  
Major 1st Battalion—George Troth.  
Major 2d Battalion—Charles Hesser.

#### *Eighty-first Regiment, P. M.*

Colonel—Stephen D. Hurst.  
Lieut. Colonel—Thomas B. Florence.  
Major 1st Battalion—Caspar Moffat.  
Major 2d Battalion—George Glaue.

#### *Ninety-sixth Regiment, P. M.*

Colonel—Wm. Markward.  
Lieut. Colonel—Christian Byer.  
Major 1st Battalion—Wm. Davis.  
Major 2d Battalion—Samuel Miller.

#### *102d Regiment—Volunteers.*

Colonel—Joseph Murray.  
Lieut. Colonel—Thomas Keohler.  
Major 1st Battalion—Joseph Aken.  
Major 2d Battalion—James Gay.

#### *108th Regiment—Volunteers.*

Colonel—James Page.  
Lieut. Colonel—W. C. Patterson.  
Major 1st Battalion—Wm. W. Weeks.  
Major 2d Battalion—C. Morgan.

#### *128th Regiment—Volunteers.*

Colonel—John G. Watmouth.  
Lieut. Colonel—John P. Biens.  
Major 1st Battalion—Byerly G. Cox.  
Major 2d Battalion—Adam Woelper.

#### *Regiment of Artillery.*

Colonel—A. J. Pleasonton.  
Lieut. Colonel—John K. Murphy.  
Major 1st Battalion—George Humm.  
Major 2d Battalion—Frederick Fritz.

#### PHILADELPHIA CITY, June 5th, 1835.

The subscribers having, agreeably to law, opened and examined the returns of votes given at the several elections, held on the 1st day of June, A. D. 1835, for Brigadier General, Brigade Inspector, and Field Officers of the different Regiments, composing the First Brigade, First Division Pennsylvania Militia, do hereby certify, that the above is a correct return of all the officers elected in said Brigade, the subscribers having been first duly qualified according to the Act of Assembly.

Attest—

MICHAEL W. ASH,  
Alderman.  
DANIEL SHARP,  
Brigade Inspector.  
W. P. SMITH,  
Citizen.

### RAIL ROAD ACCIDENT.

We learn from the news books of Mr. Potts, that as one of the cars attached to the "People's Line," on the Columbia Road, was yesterday morning descending the inclined plane, the bolt which prevents the wheels from running, came out of the break, when the car descended with such rapidity and violence, that it was dashed to pieces. The agent, Mr. Beatty, a young man, was holding the break on the car, when he was violently thrown under, and mangled in so shocking a manner, that no hopes can be entertained of his recovery. He was taken up insensible, and carried to the Third Street hall, where he now remains.

Fortunately the passengers had got out of the car, before it began to descend, and walked down, thereby preventing a much more melancholy occurrence.—*Inquirer*.

Sawberries were sold in our Markets yesterday, (10th) at 12½ cents per quart.—*Inquirer*.

### VALUABLE PROPERTY.

A very valuable property was sold at the Merchants' Exchange, last evening, (10th.) We allude to the lot of ground situate at the southeast corner of Walnut and Sixth streets, and at present occupied by the Walnut Street Prison and Prune Street apartment.

It contains in front on Walnut street 199 feet, and extends in depth on east side of Sixth st. opposite Washington Square, 423 feet to Prune street, upon which it has a front of 199 feet, to be subject to a street 27 feet wide, called Adelphi street, to be laid out at the distance of 220 feet south of Walnut street. It was sold for \$219,099—or at the rate of \$1,101 per foot—John Moss, Esq. was the purchaser.—*Inquirer*.

CROPS.—During the past week or two, a number of Wheat, Rye, and Grass stalks, of a large growth, was left with us for inspection. Among the rest, a stalk of rye which grew upon the premises of Mr Jesse Bockius,

measured the unusual length of eight feet lacking half an inch, and others from the farms of Mr. Green and Mr. Botton, all of this town, reached nearly seven feet in length. A stalk of clover, from Mr. Botton's farm, measured three feet, which is but a fair specimen of a field of several acres. Every day seems to add fresh health and vigor to the crops, and we are gratified to be informed that their appearance in general, is quite encouraging.—*Germantown Telegraph*.

### COATESVILLE.

This village is situated on the Lancaster turnpike, 13½ miles from West Chester, and 30 from Philadelphia.—It is in the Great Valley, one of the most fertile valleys in Pennsylvania. It contains from thirty to forty or fifty houses—among which are three taverns, one of which is conducted on Temperance principles—several stores—a Presbyterian Church, a school house, &c. The town has an air of business, and like most of our country villages, its inhabitants are generally mechanics, active and industrious.

Coatesville possesses an unusually picturesque and pleasing situation. The Valley Hill, bounding the view is on its north side, and another high hill rises one or two hundred yards on the south. The Pennsylvania Rail Road, for a considerable distance, is in full view; and a magnificent bridge is erected at this place over the waters of the Brandywine, towering above 80 feet in the air, stretching across a chasm five or six hundred feet wide.

Since the completion of the rail road a new spirit of enterprise has arisen, which promises almost to double the size of the place. At the junction of the rail road and the turnpike, a few rods west of the old town, a number of building lots have been sold at high prices by Mr. James Yearsley, and two dwellings, a large tavern house, a store and smith shop, are rapidly approaching completion. Other buildings are contemplated in the spring, a new tan and bark house is now being built, and two cellars for dwelling houses are already finished. We must not omit to mention, among the improvements, a depot lately erected on the rail road by our friend, Mr. Benjamin Miller, and a contemplated branch rail road to Luken's rolling mill, a few rods south of the village.

On a short visit, last week, we were struck with surprise at the numerous improvements. Coatesville is one of the oldest towns in the county—and derived its name from Moses Coates, formerly a landholder. We were told by an elderly citizen of the neighborhood, that upwards of 30 years ago it consisted of only one or two houses, a smith shop, a store and a tavern.

Returning, our course to West Chester was over the hill on the south side of the village. It is not without some labor you gain the top, but when there the beautiful scenery amply compensates the labor of the picturesque. The name of the hill we could not ascertain; but it undoubtedly affords one of the handsomest prospects in Chester county. On the south, the spectator has before him a small valley, completely surrounded by high hills: in the valley are two or three large farm houses, and Mode's Paper mill; along the southern side flows the Brandywine, the course of which is distinctly marked by the green cedars and pines which grow upon its banks. On the north, the town of Coatesville affords a delightful view—apparently situated under the high bridge, which towers far above the house tops.

From Coatesville, the usual route to West Chester is by Romansville and Marshalton. The former place is popularly known as "Kildier Hill," and the latter as the "Centre House." Having fallen in with a respectable farmer of the neighborhood of Romansville, we acquired quite a knowledge of its local history. Though

its soil is now rapidly improving, it appears that years back it was so barren, it obtained the cognomen of "Kildier Hill," which is perpetuated to this day—after the adage which is frequently used in common parlance, that such a country "is too poor to keep a kildier." Whatever truth belonged to the observation some time ago, its cause is now vanishing, for thereabouts are now many excellent farms and good agriculturalists.—*Village Record*.

### Kittanning, Armstrong Cy. Pa. June 5.

**SHEEP.**—A fine flock of merino stock sheep, of nearly 500 head, belonging to Mr. Samuel Patterson, of Washington county, passed through this place yesterday, on their way to Wayne township. They are really an acquisition.

### WOOL.

The Washington (Pa.) Reporter of the 2d inst. says, "Lots of wool, grading between 7-8ths and full blood, have been sold during the past week at 56 cents per lb. The prices now offered range from 33 to 60 cents. At the vendue of James Gilmore, Esq. deceased, the wool sold at 57 cents per lb. the grade being between 7-8ths and full blood, and the sheep as follows—weathers \$1.50 per head; weathers and ewes \$3.50; ewes with lambs \$5."

**WOOL.**—The following article from the Commercial List and Philadelphia Price Current, of Saturday last, is deserving the attention of farmers generally:

This article is becoming one of the greatest importance to our country. Indeed, it would be difficult to account for its culture having so long been neglected, where all the means of producing it, are so abundant. We know of no part of the world where Wool has been higher on an average, for the last ten years, than in this country, and no one better calculated to raise it for export, than this. Instead of making it an article of remittance to Europe, we have been, and are at present importing it in large quantities, the importer realizing (it is said) a fair profit for his enterprise. By the growth and manufacture of Wool, England has added immensely to her wealth and power. Her clip has been estimated for some years past, to exceed one hundred and forty millions of pounds annually: while here, with a soil and climate better adapted for its growth, with lands at about one eighth the price, and ten times more extensive; we do not produce more than seventy-five millions of pounds.

In 1830, after a careful investigation, the number of sheep in the United States were estimated at twenty millions, producing fifty millions of pounds of Wool. At the present time a fair estimate would probably be above twenty-eight millions.

Pennsylvania especially, with her unoccupied hills and dales, should look seriously to this matter. We believe that no state in the Union is better adapted for the growth of Wool, yet New York is at present considerably in advance of her. The clip in New York is estimated at six millions of pounds, while that of Pennsylvania is only four to four and a half millions. Either of these states could annually produce twenty millions of pounds, without decreasing any other of their present productions.

There are several counties in the Western part of this State that have entered with great spirit into this business, and "sheep farms," (as they are there called) are rapidly advancing in value. Among these we would instance Washington, Fayette and Greene counties. The former county alone, will probably sell this year above half a million of pounds of Wool, yielding at least two hundred thousand dollars in cash, as the finer qualities of Wool are principally grown there.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.--NO. 25.

PHILADELPHIA, JUNE 20, 1835.

No. 389.

## CHESAPEAKE AND DELAWARE CANAL.

Sixteenth General Report of the President and Directors of the Chesapeake and Delaware Canal Company.—June 1, 1835.

The Board of President and Directors of the Chesapeake and Delaware Canal Company, in offering the present Report, and the Treasurer's account, are under the necessity of presenting to the proprietors a statement of difficulties and embarrassments encountered since the last annual meeting, which have caused anxiety and trouble to those engaged in the management of the affairs of the Company, and loss to all who are interested in it.

Although it is a source of regret to the members of the Board that they cannot give a more favourable statement, yet it is due to themselves and the Stockholders that an accurate exposition of the concerns of the Company should be made, however gloomy it may appear, that those interested may have an opportunity of forming correct opinions of its present situation.

In the last Annual Report the Stockholders were informed that a verdict against the Company, for a very large amount, had been obtained, in one of the courts of the state of Delaware, by a contractor, whom the Board of Directors had felt themselves under the necessity of discharging from their service, and that exceptions had been taken to the decisions on some of the law points involved in the case. These points have not yet been brought before the Court of Appeals, where they may be taken for five years from the date of the verdict, and are ultimately to be decided. The decisions on them may annul the former proceedings and verdict.

Since this verdict has been obtained, strenuous efforts have been made to render it available, by resorting to different processes of law, and by the aid of popular feeling. To enlist the latter, various efforts have been made, through the medium of the press and by other means. The law proceedings have been duly attended to; the others were unnoticed.

An attempt was made, during the last session, to procure the passage of a law by the Legislature of Delaware, to enable a judgment creditor to sell the corporate rights and franchises of the Company, and by such sale vest them in the purchaser. Notwithstanding the powerful interest and influence that was brought to bear on the subject, the bill was rejected. The Board feeling it an imperative duty to guard the interests of the Stockholders and the just creditors of the Company, did not of course concur in this project.

Whatever might have been, under any circumstances, the opinion of the Board of the justice of the large claim referred to—had they even supposed it well founded, they had not funds to pay it—and could not (as they believe,) either in law or equity, give that claim a priority over others arising from money loaned to the Company, for the formation of the Canal, and for which a mortgage of the tolls, and all other property of the Company had been given, previous to the verdict which it has been endeavored to make precede them—the claims under which would have been of no avail without these loans, as the Canal could not have

been completed, and would of course have been of no value.

But the claimant under the verdict, having stood by whilst the Company were issuing proposals for loans in the public newspapers; and borrowing money, time after time, on the faith of pledges thus publicly stated and given to the loaners; has now come before the Chancellor of Maryland, and asked, that these securities should be declared null and void, and that his claim may come in before them. No decision has been had on this application. Application was also made to the Chancellor of Maryland, for the appointment of a receiver of the tolls of the Canal. This was granted, so far as respects the tolls to be collected at the Maryland end of the Canal. From this decision an appeal was made, and the case taken to the Court of Appeals. A further application has been recently made to the same Chancellor, for a decree to order the real and other property of the Company to be sold—as well that part of it in Delaware as that in Maryland. A final decision on these several points will probably take place in a few weeks, and there is a well founded belief that the judgment will be adverse to these extraordinary claims. The Board are confident that the Chesapeake and Delaware Canal Company had the same right to borrow money, to aid in the construction of their Canal and the purposes incidental to it, as the several corporations for making internal improvements in Pennsylvania, Maryland and other states, who have resorted to that expedient, as the only available means to enable them to effect the great, and beneficial objects, for which they were chartered.

Proceedings of a different character were commenced in the early part of last season and continued for several months, in the state of Delaware; probably with the view of harassing those engaged in the trade through the Canal; and by thus interfering with and preventing it, to coerce those interested in the Company into a payment of the claim under the verdict. The captains of vessels about passing through the Canal, after having paid the required toll to the officers of the Company in Maryland, when the vessels were passing from that state, and in Philadelphia, when going from thence, receive a regular receipt for the toll paid, with an order to pass through the Canal in right of such payment; the Company of course having no further claim, debt, or demand against them for toll. Notwithstanding this, which is matter of public notoriety, and susceptible in most cases of complete proof, the captains in some hundreds of instances have been arrested and held to bail as garnishees, and in each case oath or affirmation is made as follows: "that the

the garnishee above named, is not an inhabitant of New Castle county, and that he, the deponent, doth verily believe that the garnishee is indebted to the defendants in the sum of \_\_\_\_\_." In default of finding bail, which has been the case with strangers, they have been cast into prison, and kept there until the amount of indebtedness sworn to was deposited as a pledge—or bail procured for their appearance at a court to be held months after, and in some instances far from their homes. During these proceedings, the vessels were necessarily prevented from prosecuting their

voyages, causing losses to all concerned, either in vessel or cargo, and the Canal, as "a public highway," thus virtually obstructed. This has been effected under colour of some of the laws of Delaware, but it is believed in violation of the charter of the Canal Company—a charter, which may be considered as a joint grant or compact by the states of Pennsylvania, Delaware, and Maryland—in which each state, granted to the other certain advantages and received certain benefits in return. The right to make the Canal (by an incorporated company,) and thus open a highway between the South and the commercial metropolis of Pennsylvania, and a new way by which she could transport to it the produce of her interior counties, was granted to her by Maryland, only on condition that the Susquehanna river should be declared a highway, and authority given to remove obstructions from it—a grant highly advantageous to Maryland. Delaware stipulated for the delivery to her of certain valuable documents held by Pennsylvania, and also that the latter state should make certain alterations in her quarantine laws, the object and effect of which was to benefit the former.—These stipulations were acceded to by Pennsylvania, and she has complied with them.

Under these agreements, the charters of the Chesapeake and Delaware Canal Company were granted by Pennsylvania, Delaware and Maryland. The charter declares as follows, viz: "That the said Canal and the works to be erected thereon in virtue of this act, when completed, shall forever thereafter be esteemed and taken to be navigable as a public highway, free for the transportation of all goods, commodities, or produce, whatsoever, on payment of the tolls imposed by this act; and no toll or tax whatsoever for the use of the waters of the said Canal, and the works thereon erected, shall at any time hereafter be imposed by all or either of the said States."

The charter also declares, that if any vessel shall pass without having paid the tolls, she may be seized and sold by the officers of the Company. After the sale of the vessel, "the person having direction of such vessel shall be liable for such toll, if the same is not paid by the sale of such vessel." Thus, under the charter, captains of vessels are not liable for toll even to the Company, until recourse is first had to a sale of the vessel, and the funds arising from the sale being insufficient to pay the toll. Yet after a compliance with all the requisitions of the Company under the charters, persons have been arrested and imprisoned in a place where they are strangers and without friends, in doing what the charters of Pennsylvania, Delaware, and Maryland declare they shall have a right to do, viz: use the Canal as a "public highway," after payment of the tolls imposed by the Company in conformity with the charter.

The embarrassment and annoyance to which persons passing through the Canal have been thus subjected, has been effected by means of processes under the laws of Delaware; the law which is said to be most applicable to the cases, having been passed subsequent to the charter of the Company.

Efforts were made by some of the persons aggrieved to test the validity of these arrests, at the court held at New Castle, in November last. But the cases were not tried; and it has since been agreed between the counsel of the parties, that the different classes of cases should be stated and submitted to the Court of Appeals to be held at Dover early in the present month. It is confidently believed, that when the proceedings referred to shall be brought before a judicial tribunal, they cannot be sustained, and that a recurrence of them will be prevented.

The system of annoyance, which has been so long and so tenaciously pursued, has diminished the advantages arising from the Canal, not only to those directly interested in it, but also to the public at large. Injury has

thus been inflicted on a vast number of persons interested in the results of the Canal trade, who are entirely unconnected with the matter in controversy—a controversy which hitherto has only resulted in loss to all the parties, and a diminution of the ability of the Canal Company to meet demands against it.

It may be proper to state, that since the proceedings before the Chancellor of Maryland, no arrests of captains have been made, and the trade of the Canal has been increasing.

The locks, bridges, waste weirs, and banks on the line of Canal, are now in good order.

During the past season, two slips or sinkings-in of the sides have occurred in that part of the Canal called the Deep Cut. Although they did not occasion a stoppage to the business of the Canal, yet they caused a considerable expenditure in the necessary removal of a large quantity of earth from the banks, to prevent its falling into the Canal. The earth taken from these places has been used to raise and strengthen the towing path, which had been washed away, when the embankment on Broad creek was broken, in the spring of 1834. The foundation of the Maryland pivot bridge had been then so greatly injured, and the superstructure was found to be so much decayed, as to render a new bridge indispensable. This has been made more securely, and of greater stability, than the former one. The new embankment across Broad creek, in place of that carried away, has been made so strong, and is so well protected, as to prevent the apprehension of any further accident; and it has now stood for several months the test of a pressure of a full head of water.

The Canal and reservoirs are now filled with water, which will probably prevent a recurrence of the difficulties experienced during last summer from the want of it, the deficiency of the supply then, having been caused mainly by the loss of a large portion of the water from the upper level of the Canal, by the breaking of the embankment referred to—and as this happened at the commencement of the dry season, the apprehensions of a deficiency of water, which were stated in the last Report, were fully verified.

The want of water in the upper level of the Canal, prevented for some months the larger class of vessels from using it. This circumstance, in addition to the difficulties and embarrassments to which the trade on the Canal has been subjected, by the arrest of those engaged in it, has prevented many persons from entering into it, who otherwise would have done so; and obliged many others, who previously had made their voyages by way of the Canal, to abandon it, and make them by sea. These various causes have diminished the tolls below the amount received the previous year, and made them fall far short of what, under different circumstances, they might have been fairly estimated.

The tolls received since the last Annual Report amount to \$47,511 30, and having principally arisen from vessels laden with the following articles, viz:

290 packets carrying merchandize.	
826 vessels carrying wood,	20,897 cords,
678 do. and arks, carrying lumber,	
72 do. do. flour,	18,143,000 feet.
98 do. do. wheat, corn, &c.	15,350 barrels.
184 do. do. oysters,	130,610 bushels.
2741 do. do. cotton, iron, coal, whiskey, &c.	3,886 tons.
	and vessels returning empty.

4889

The following statement shows the number of passages through the Canal, and amount of toll received during the corresponding periods of the last and preceding years.

*Number of Passages.*

From	From Del.	From Ches.	Total.
June 1, 1833, to Jan. 1, 1834,	2136	2035	4171
Jan. 1, 1834, to June 1, 1834,	667	600	1267
			5438
June 1, 1834, to Jan. 1, 1835,	1591	1696	3287
Jan. 1, 1835, to June 1, 1835,	731	870	1602
			4889
<i>Amount of Tolls.</i>			
June 1, 1833, to Jan. 1, 1834,		\$42,678	32
Jan. 1, 1834, to June 1, 1834,		11,413	34
		\$54,091	66
June 1, 1834, to Jan. 1, 1835,		25,541	31
Jan. 1, 1835, to June 1, 1835,		21,969	99
		\$47,511	30

Although the present Report does not give a flattering view of the concerns of the Company, yet on the other hand it may be proper to state, that the increasing trade on the Delaware and Raritan Canal, the Chesapeake and Ohio, and Dismal Swamp Canals, give promise of an increase also of the trade of the Chesapeake and Delaware Canal. The position of this Canal, its great capacity, and the many avenues leading to it, both naturally and by the internal improvements now in successful operation—and that contemplated on the lower part of the Susquehanna—all point out to the Chesapeake and Delaware Canal as a great thoroughfare; and strongly indicate that the Company to which it belongs will ultimately be successful.

The members of the Board confidently trust the Company will yet triumph over the many difficulties it has encountered, and repay those by whose aid a great public benefit, at least has been achieved.

This supposition is strengthened by the fact, that other canal companies in our country, after having experienced difficulties and embarrassments of various kinds, have surmounted them all, and are now in a state of increasing usefulness and prosperity.

Signed by order and on behalf of the Board of President and Directors.

R. M. LEWIS, President.

S. GRIFFITHS FISHER, Secretary.

For the Register.

### TRAVELLING IN 1784 AND 1835.

In the year 1784, Frederick Schaeffer established a travelling accommodation by a stage, which occupied three days in going and three in returning to Lancaster from Philadelphia. In the year 1788, Frederick Dosh run a two horse stage between Lancaster and Philadelphia, in two days going and two returning. In 1794, the turnpike having been completed between Philadelphia and Lancaster, Mathias Slough placed a four horse stage on the route, driven by Jonas, a driver of some celebrity, in one day going, and one in returning, between the hours of two o'clock in the morning and eight in the evening; fare six dollars. On the eighth of June, 1835, the Cars by the Rail road, left Philadelphia at half past eight in the morning, after breakfast,

and arrived at Lancaster at half past one o'clock; fare two dollars and fifty cents.

### *Reminiscences.*

A friend has supplied me with the foregoing information. R. C.

### REPORT OF ALONZO LIVERMORE, ENGINEER.

FRENCH CREEK AQUEDUCT,  
October 31st, 1834.

To John Anderson, Esq.,

Superintendent of the French creek division, of the Pennsylvania Canal.

Sir—I herewith hand to you my annual report, embracing the information required from the secretary of the Board of Canal Commissioners, relative to the present state of the work upon the French creek division, as pertaining to my department.

The *new work* not heretofore reported finished, comprehends the Franklin line, twenty two and a fourth miles, and the north and west ends of the feeder, four and a fourth miles, altogether twenty-six and a half miles, in extent; eighteen and a half miles of this is slackwater, and eight miles of canal navigation. The towing path along the pool of the feeder dam which was not fully staked out until this year, gives a small difference in the distance as heretofore reported.

The new work added to the old feeder line, nineteen and a half miles, makes the whole length of the French creek division, to be forty-six miles, eighteen and a half of which is slackwater, and twenty seven and a half of canal navigation.

The mechanical work upon the *new line* of this division, consists of twenty-one locks, twelve dams, one culvert, three towing path bridges, seven road and farm bridges, seventeen lock houses, and six waste wiers.

The *locks*, twenty are of cut stone masonry, and one of wood, four of these are guards, eight are lift locks with guard walls, and nine lift without guard walls. The whole rise and fall overcome is one hundred and twenty-eight and a half feet.

The *dams* upon this line are built with cribs of timber filled with stone, and cut stone abutments, laid in the New York hydraulic lime. The average length of the dams, in clear of the abutments, is two hundred and sixty seven feet. The lowest is six feet, the highest sixteen feet, and the average height ten and a fourth feet.

Most of the dams having been completed last fall, have been in some measure tested as to their permanence by the floods of last winter and spring. We find that those which have not less than three feet base, to one of perpendicular rise for the breast slope, gives to the descending water such an oblique impact upon the gravel below the dam, that the excavation caused by the water, is thrown so far below the lowermost breast timbers, that no injury appears likely to result to the foundation of the dam itself. Two of our dams which had not this slope, the water had excavated so near the foundation as to endanger the work. I therefore directed an additional breast, which has been made this season, and I feel confident that our dams are rendered permanent, if due care is taken for their preservation.

The *feeder dam* it will be recollected was left last fall in a very precarious situation, as regards the work done, on account of the exhaustion of the funds. We found this spring that most of the work done was washed away. This and the additional breasts on the two dams, above mentioned, have swelled the expense upon those items, in some measure, but our contingent allowance of last year, will fully meet this addition, besides all other expenses of a contingent nature.

There are *no aqueducts* upon this line, and but one *culvert*. This is situated upon section No. 36 of the

Feeder line, and is built of cut stone masonry, the opening or passage for the water is two feet square.

There are *three towing path bridges*, all upon the Franklin line, the abutments and piers are cut stone masonry, and the superstructure of wood. There is one *road bridge* across the canal opposite Franklin, the abutments of cut stone and wood superstructure; all the other *road and farm bridges*, six in number are built of wood.

There are *six waste weirs*, including those around the locks, four of them built as slope wall and pavement, the others of wood.

The tabular statement, herewith submitted, contains all the important details, not otherwise mentioned.

The *Franklin line, and the north end of the feeder*, is now ready for public use. The west end of the feeder will be ready by the middle of November next. A scarcity of hands has prevailed upon this line the whole season, owing to the prevalence of the fever and ague in that neighborhood. Hands have also been scarce upon our whole line since the harvesting season commenced. This cause and the late time we received orders to prosecute our work (about the 1st of May) in the spring, give the reason why our canal was not ready by the time mentioned in our last report.

The total cost of the work will stand as follows, viz:

Franklin line,	\$340,363 90
Feeder line, new work,	68,860 12

Engineering, superintendence, and all contingencies to this time,	\$32,595 33
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Total cost when finished,	\$441,455 45
Last year's estimate,	442,558 34

Balance,	\$1,102 89
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This balance will be requisite to complete any fencing not yet contracted for, also to add foot-ways upon the lock gates that are yet not completed, &c.

It must be recollected that all money remaining as per centage on abandoned jobs, is embraced in the estimate, therefore should the Board of Canal Commissioners direct the payment of this to the contractors, it will in no way interfere with the sum or balances left in the aforementioned calculation.

*New work on the old line.*

The amount done this year consists in finishing *two waste weirs, one bridge and embankment*. Amount estimated on these jobs this year is one thousand two hundred and thirty-five dollars and ninety-four cents.—Amount yet unfurnished in order to complete the bridge, embankment, &c., is three hundred and seventy-five dollars.

All of which is respectfully submitted.

ALONZO LIVERMORE,  
Engineer.

WEST BRANCH DIVISION.

REPORT OF W. F. PACKER, SUPERINTENDENT.

To the Board of Canal Commissioners of Pennsylvania.

Gentlemen:—In conformity with the requisitions of the acts of assembly, and in compliance with the instructions of the Board of Canal Commissioners, as communicated by their Secretary, I beg leave, respectfully, to submit the following

REPORT.

In offering the present communication to the Board, it affords me infinite gratification to state that the entire line of canal under my charge has been completed; and

that final estimates have been returned from the engineering departments, upon all contracts entered into for the construction of new work upon the West Branch division. The lower division of the Lycoming line, extending from the pool of the Muncy dam to the Loyalsock feeder, was completed and the water admitted into the upper levels about the last of June. On the *fourth of July*, the first boat, "*The James Madison*," ascended the canal and moored at the western bank of Loyalsock creek, since which period the navigation from that point has been uninterrupted, except during a few days of unusual drought, when the water in the creek proved inadequate to supply the levels. It is not, however, anticipated that any scarcity of water will hereafter occur, as the quantity furnished by the feeder dam at Duncsbury, is abundant; which, aided by the Loyalsock, will in my opinion be amply sufficient for all the purposes of transportation. Should this supposition, nevertheless, be found by experience to be erroneous, the supply may be very considerably augmented by cutting off the water power which at present propels the Loyalsock mills, owned by Tunisson Coryell, Esq. The Board are aware that the site of Mr. Coryell's mill dam was selected as the most eligible for the erection of a feeder dam, and that he in consequence claims the right of tapping the canal with his race—the level of which being lower than the canal, gives him a perpetual head of water, whether there is a sufficiency for the purposes of navigation or not. Privileges so important in their consequences as those asked by Mr. Coryell, and hitherto tacitly allowed, should most certainly only be granted under proper limitations and restrictions. The *vested rights* of individuals, it is true, cannot be held too sacred; when our citizens cease to be protected by government in their *rights of property*, one of the strongest cords in the ligament which binds civil society together, will have been severed: but that protection can only be afforded by the legitimate exercise of *sovereign* power. Individual and local interests must yield to the general good; and it damages are thereby sustained, let the party injured be promptly remunerated, and full and ample indemnification made against all pecuniary privations. In this point of view, public policy seems clearly to dictate, that the magnificent works of internal improvement constructed at the expense of the State, should be solely under the control of her public functionaries, free from all associations or partnerships, and not subject to the caprice of any interested individual.

The upper division of the Lycoming line, being in such a state of forwardness as to justify the admission of the water, it was let into the canal, through the guard lock at the feeder dam, above Duncsbury, on the fifteenth of September; and, although its progress was greatly retarded by the dryness of the season, and the consequent loss of water by soakage and evaporation, the levels have all been filled, and boats laden with merchandize, coal, plaster, &c., have ascended the canal to its junction with the Bald Eagle creek. Thus proving to a demonstration that the supply of water furnished by "*the High dam*," (as the feeder has been significantly termed,) may be relied upon in times of the greatest drought with absolute certainty. The water has seldom, if ever, been known to be lower in the West Branch than it is at the present period, and yet it gives me pleasure to state that there is no scarcity in the canal, and that all apprehension for the future may be dismissed. As the banks become saturated, the loss from filtration and soakage must necessarily be diminished; and an increased supply for canalling purposes will be the inevitable consequence. The feeder dam was completed about the first of January, and judging from the slight effects produced by the ice freshet of last spring, and the floods which have since occurred, no doubt remains in relation to its permanency. About one hundred and twenty feet of the breast plank were taken off by the ice, which was the only injury sustain-



ed; and that has since been substantially repaired.—The chute, also, fully answers the purpose for which it was intended; and those who were interested in the river trade, and most strenuously opposed to its construction, are now constrained to acknowledge that it can be passed in perfect safety—not the slightest difficulty is experienced. It may not perhaps be amiss to remark that popular opinion relative to the feeder dam and chute, has undergone an entire revolution; the manner in which those structures have stood the test of experience, has irresistibly forced even prejudice and error, although deeply rooted, to acknowledge their practicability; and it is with proud satisfaction I can state at this early stage of their practical operations, that a single individual cannot now be found to raise his voice against them.

On the fourth day of July, the water was first admitted into the Bald Eagle side cut; and it has been in constant navigable order since the first of September. The traffic which has already commenced upon it, between the bituminous coal and iron regions of Lycoming and Centre counties, in the transportation of coal to the Bald Eagle, and carrying back iron, pigs, castings, &c. gives an earnest of its future usefulness, and demonstrates that the small amount of fun is appropriated to its construction, have been wisely applied. In addition to its importance to the neighborhood, as a great thoroughfare between the coal and iron districts, it confers substantial advantages on the whole line as a feeder. The Bald Eagle is a permanent stream, and in dry seasons, when the river fails, there is one half as much water in the former as there is in the latter above its junction. This consideration alone, would have been sufficient to warrant its construction; and any other location of the feeder dam than the one adopted by the board, would have been, if at all practicable, to say the least of it, unwise and injudicious.

The *Lewisburg side cut* was on the verge of completion, at the date of my last report—the water was let into it in November, and several boats passed through it before navigation was suspended by the inclemency of the season. Since the opening of the canal in the spring, transportation upon the side cut has been without interruption: and an avenue to market, thereby afforded for the immense agricultural productions of Buffalo, Penns and Sugar valleys. The luxuriant crops of wheat, rye, corn, barley, &c. which are annually produced in the fertile region, drained by the waters of Buffalo and Penns creeks, are perhaps unequalled by the same extent of country in Pennsylvania; they are certainly not surpassed. Lewisburg, situated at the junction of Buffalo creek, and the West Branch of the Susquehanna, has always been the natural depot for the surplus products of those valleys, and the precarious navigation of the river, thence to tide water, resorted to as the only out-let to a seaboard market. By the side cut just completed, a new channel has been opened up, and a choice of markets afforded to the industrious husbandman—while the commonwealth will be richly compensated by the increase of tolls which will, from this source, necessarily ensue.

The whole length of the Lycoming line, including feeder, as stated in my last annual report to the Board, from the point of transit of boats in the pool of the feeder dam, is forty-three miles and two hundred and fifty-eight perches, including two miles and two perches of towing path and slack water in the pool of the Muncy dam. Upon which there are twelve locks, embracing thirteen lifts, and eighty-two feet of lockage, including one foot of head at the guard lock; averaging 1.87 feet per mile.

The length of the *Bald Eagle side cut*, including the breadth of the river, is three miles and two hundred and eight perches; embracing eight feet of lockage, which is overcome by one lock near the feeder dam—and the *Lewisburg side cut* is two hundred perches in length, and has twenty-one feet of lockage; which is overcome

by a combined lock of two lifts of eight feet each, and a single lock of five feet lift; making the aggregate length of canal and slack water completed on this division since my last report, as follows:

	Miles.	Perches.
Lycoming line and feeder,	43	258
Bald Eagle side cut,	3	208
Lewisburg side cut,		200
Total distance,	43	26

The Board will observe that included in the foregoing are two miles and two perches of slack water, which may have been heretofore annexed to the finished lines of canal, in summing up the aggregate length completed and in active operation; but as they were attached to the Lycoming line, originally, and constructed out of the funds appropriated to it, I have deemed it proper to report them together.

The following statement exhibits the actual cost of the Lycoming line and feeder, as ascertained by final estimates returned from the engineer department, viz:

Sections of canal and slack water,	\$368,144 75½
Aqueducts,	95,703 90
Dams,	85,209 83
Chute at feeder dam,	35,022 77
Locks,	77,303 01
Public, farm and foot bridges,	55,336 04½
Towing path bridges,	16,063 72
Fence,	21,026 35½
Culverts,	23,243 14
Guard gates,	6,331 51
Lock houses,	5,330 03½
Waste wiers,	3,155 26½
Hydraulic cement,	4,322 01
Removing buildings,	3,501 59½
Castings and wrought iron,	5,389 18½
Cast iron conduit at Williamsport,	545 62½
Wells,	291 51½
Repairing and strengthening jobs, bridge embankments, &c.	29,316 97
Head gates at Coryell's mill race,	350 00
Work finally suspended by change of location,	27,006 26½
Water courses,	58 48
Miscellaneous work,	592 30
	<hr/>
	\$1,083,644 174
Deduct State materials,	5,602 28
Total cost of Lycoming line,	<hr/>
	\$1,078,041 99½

The following abstract shews the actual cost of the *Bald Eagle side cut*, as ascertained by final estimates returned from the engineer department, viz:

Sections,	\$19,663 36
Locks,	15,648 60
Culverts,	456 66
Waste wiers,	387 71½
Bald Eagle dam and chute,	8,784 97½
Public and farm bridges,	2,250 43
Lock houses,	983 44
Fence,	1,478 83
Castings,	196 00
	<hr/>
Total cost of Bald Eagle side cut,	<hr/>
	\$47,850 01

Abstract shewing the actual cost of the *Lewisburg side cut*, as ascertained by final estimates returned from the engineer department, viz: Canal, dam lock, culvert and lock houses, complete,

	\$2,739 75
Towing path bridge,	1,707 84
Fence,	382 00
Removal of buildings,	200 00
	<hr/>
Total cost of Lewisburg side cut,	<hr/>
	\$32,029 59

## RECAPITULATION

Showing the entire cost of the *new work* upon the West Branch Division:—

Lycoming line and feeder.	\$1,078,041 99½
Bald Eagle side cut,	47,850 01
Lewisburg side cut,	32,029 59
	<hr/>
	1,157,921 59½
Engineering, superintendence and incidental expenses,	45,652 18
	<hr/>
Total cost,	\$1,203,573 77½
Deduct amount paid,	1,148,209 33½
	<hr/>
Balance unpaid,	\$55,364 44
From which, deduct the amount of appropriation for 1834, yet unexpended,	10,422 42½
	<hr/>
Total amount required to complete Lycoming line and Lewisburg and Bald Eagle side cuts,	\$44 942 01½

The following is a statement of the several appropriations to the Lycoming line, &c., and of the disbursements made:

By the act of March 31st, 1831, there was appropriated to the Lycoming line and Lewisburg side cut, the sum of \$200,000, from which sum a deduction was made at the Treasury, for payment of interest, of \$41,576 14, leaving a balance applicable to construction, of	\$158,423 86
There was set apart for this line, out of the appropriations authorised by the act of April 5th, 1832, of \$300,000, and the Girard legacy of \$300,000, the sum of	229,000 00
By the act of 16th February, 1833, there was appropriated, the sum of	470,007 90
Appropriation for the present year,	301,200 00
	<hr/>
Whole amount of available funds appropriated to this line,	\$1,158,631 76

## DISBURSEMENTS.

Sections,	\$552,986 18
Aqueducts and aqueduct sections,	112,305 81
Dams and schutes,	132,877 30½
Locks, and lock sections,	112,198 83
Culverts,	22,467 96
Canal and towing path bridges,	72,524 64½
Fence,	18,665 09
Removals, &c.,	4,389 06½
Miscellaneous work,	36,060 55½
Lock houses,	5,545 23½
Waste wiers,	3,289 07½
Lewisburg side cut,	29,245 40
Engineering, superintendence and incidental expenses,	45,652 18
	<hr/>
Total amount paid,	1,148,209 33½
	<hr/>
Balance of former appropriations on hand,	\$10,422 42½

## RECAPITULATION.

Total cost of Lycoming line, Bald Eagle side cut, and Lewisburg side cut,	\$1,203,573 77½
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Whole amount of appropriations to the above objects,	1,158,631 76
Amount required to complete,	\$44,942 01½

From the foregoing it will be perceived that the amount required beyond the appropriations to complete the Lycoming line and Bald Eagle and Lewisburg side cuts, is \$44,942 01½. This apparent discrepancy between the estimate of last year, and the actual cost as now exhibited, can be accounted for very readily, and I hope satisfactorily. In the estimate of the engineers, upon which the last report was predicated, no allowance was made for necessary repairs of jobs which had previously been completed, nor for any new work which might incidentally occur—the allowance for five per cent. which was added upon the balance then required to complete, being barely sufficient to defray the expenses of engineering, superintendence, &c. By a reference to the tabular statements accompanying this report, it will be observed that the work done at repairing and strengthening jobs, graveling dams, raising bridge embankments and constructing rip-raps to protect against the river, amounts to twenty-nine thousand, three hundred and sixteen dollars and ninety-seven cents—that the guard gates at the Blue Rock, near New Liberty, cost four thousand five hundred and twenty-seven dollars—that the bridges and culverts erected across ravines in Muncy town, authorized to be built by a recent resolution of the Board, amount to near one thousand dollars—and that the article of iron, cost five thousand three hundred and eighty-nine dollars. The aggregate of these items alone, none of which were included in my last year's report, amounts to more than forty thousand dollars; and there are many others of less amount, to which it is unnecessary here to refer. The repairs which were made, and the new work directed since the last appropriation was granted by the Legislature, were rendered absolutely requisite by the effects of the spring freshets; and a due regard to the interests of the Commonwealth urged their completion, whether there were a sufficiency of funds provided or otherwise.

A detailed statement shewing the amount estimated, per centage retained, and amount paid, during the present year, upon each item of work done upon the Lycoming line, as required by the instructions received through your secretary, will be found among the documents accompanying this report; and also, a statement exhibiting the pay and the amount paid to each officer and agent on this line during the same period; to which the attention of the Board is respectfully referred.

By a reference to the documents herewith submitted, you will observe that the amount of damages paid on the West Branch division, upon offers made by the Board of Canal Commissioners, and awards of the Board of Appraisers, during the current year, is three thousand five hundred and forty-seven dollars and seventy-five cents.

The reports and accompanying tabular statements of James D. Harris and Robert Faries, Esquires, principal engineers on the West Branch division, submitted with this report, exhibit in detail the final estimates on each section and item of incidental work, together with the names of the contractors and the various prices. They also present much statistical information, in relation to the public works upon their respective divisions, which I trust will prove satisfactory.

In the amount required to discharge the final estimate upon the Lycoming line, as exhibited in this report, a sum necessary for the protection of sections No. 9, 31, and lock section No. 4, has not been included; because, the canal being now in constant navigable order, it seemed to me to be an appropriate charge upon the fund for repairs; neither has any allowance been made for engineering, superintendence and contingent expenses from and after this day. Section No.

31, and lock section No. 4, are located near the river, and since the admission of the water, the soakage from the canal has caused the banks to slip between the towing path and the river; thereby rendering its immediate protection an imperative duty. The estimate for the completion of which is five thousand and three hundred dollars. Section No. 9 is somewhat similarly situated, except that the public road passes between the canal and the river; and being near the level of the bottom of the canal has been rendered a quagmire by the soakage; so that the preservation of the road as well as the complete protection of the canal, require that the bank should be well secured with a rip rap or other wall.— This work is estimated at eleven hundred dollars.— About twelve hundred rods of fence yet remain to be completed, which have not been returned in the final estimates. If the fence should be built during the ensuing summer, an additional sum of twelve hundred dollars will be required. The aggregate of these several items is as follow:

Protecting section No. 31 and lock section	
No. 4,	\$5,300
Wall on section No. 9,	1,100
Fence,	1,200
	<hr/>
Amount required,	\$7,600

I cannot conclude this report without turning the attention of the Board to a subject so closely identified with the successful issue of the public improvements on the West Branch, as the construction of a towing path as far as slack water is created by the pool of the feeder dam, at the head of the Lycoming line. The height of the dam above low water mark is eleven feet six inches—which affords a depth of four feet of slack water at the mouth of Queen's run, the commencement of the bituminous coal formation in the Allegheny mountain, four miles from the dam. Extensive arrangements have been made in that vicinity, for the prosecution of an energetic trade in the articles of iron and coal. The Boston company are now erecting all manner of iron manufactories upon Lick run, in sight of their coal mines, and anticipate at no distant day to compete successfully with foreign dealers, if not drive them from our markets. They have in their employ the most skilful of mechanics; and an amount of capital which will enable them fairly to test the experiment. The tolls which will arise from this source alone, would abundantly justify the construction of the proposed towing path—especially as two thirds of the expense has already been incurred in the erection of the dam. That there should be a doubt entertained as to the propriety of completing it without delay, seems to me most singular. One of the primary and leading objects which induced the expenditure of the public money upon the West Branch canal, was the accommodation of the bituminous coal trade; then what good reason can be urged for completing the improvements to a point within five miles of their greatest source of tonnage, create a slack water the remainder of the distance, and debar the public from the use of it by refusing to construct a towing path. Such a course is repugnant to every principle of public policy, and destructive to the individual interests of all who have made investments in the coal region.

The only new work now progressing upon the old line under my superintendence, is the erection of a weigh-lock at Northumberland; the whole cost of which including scales and weighing apparatus, is estimated at twelve thousand six hundred dollars, upon which three thousand dollars have been paid, leaving a balance of nine thousand six hundred dollars yet to be provided for, and as the fund applicable to this work is entirely exhausted, an early appropriation is required.

In compliance with a resolution of the Board of Canal Commissioners, George Eckert of Milton, Northumberland county, was permitted to take water from the

canal for milling purposes on the 20th of September last; for which he is bound to pay to the Commonwealth the sum of one hundred and twenty-five dollars per annum. The quantity drawn from the canal is four feet in width and four inches in height, taken from the surface.

All of which is respectfully submitted,  
WM. F. PACKER,  
Sup't West Branch div. Penn. canal.  
Canal Office, Williamsport, }  
November 1, 1834. }

From the Lancaster Union

#### ADDRESS,

Delivered before the Mechanics' Society, of this city, on Friday evening, the first instant, by REDMOND CONYNGHAM, Esq.

#### *Members of the Mechanics' Library Association:*

Having resided in this my adopted city for a few years, and experienced much kindness and civility at your hands, I would have been an apostate from gratitude had I declined participating in the transactions of this evening, especially as the object is of more importance to the interests of society than any which has ever engaged your attention.

Mechanics of the city of Lancaster! You are assembled to promote the prosperity of an Institution friendly to morals and the arts. Permit me to tell you that scientific pursuits are not incompatible with your daily employments, but that they exercise a powerful influence on those who encourage their growth; not only as a means of improvement in your respective occupations, but as a preservation of the morals of the young.

Mechanics' Institutes are now considered of such importance that their establishment will become general, and not a town or city in the Union will be without so powerful an auxiliary in the promotion of knowledge and improvements in the arts.

It will be my aim to point out the elevated position, it was intended you should occupy in the scale of human society, with the privileges you possess under our inestimable Constitution, which makes you at the same time the boast of Republican America, and the envy of Aristocratic Europe. I am aware of the responsibility I have assumed, and may the genuine spirit of benevolence inspire me with thoughts adapted to my purpose, and clothe them with language suitable for their comprehension, lest I fail in my attempt and depress the cause it was my intention to promote.

It has become too common to stigmatize the Mechanical class of the community by ranking them far below that portion of our fellow citizens who make a living without manual labor. This is incorrect, and an evident mistake. From the productive or operative class, many of our most eminent and distinguished Public Characters have originated, founders of their own fortunes and public benefactors—and why should they not have done so? Is the occupation of the Mechanic incompatible with intelligence? Can the accident of their birth render them less meritorious? Has nature given them strength of body, muscular activity and physical powers, but denied an intelligent principle to call them into action? Has nature neglected to bestow on them a capacity to receive or impart instruction, or was it intended by a beneficent Creator, that they should pursue the employment of their fathers, without any improvement in their occupation or moral condition. Who for a moment could entertain such illiberal opinions?—In Europe the expression Mechanic, is frequently applied as a term of reproach; and compilers of dictionaries, with singular inadvertency to our republican institutions and the respectable position the Mechanics of the U. States occupy in society, have bestowed on it the same ungenerous and undeserved definition. I do

not stand here as the advocate of the Mechanic—he requires no advocate—for *the American Mechanic* conscious of his rights, firmly asserts and fearlessly maintains them. In America the aspirant for distinction, meets with no opposition, he has only to assert his rights, if he desires their enjoyment. If Mechanics be not esteemed alike, the fault is their own; for the members of every profession, trade or avocation, take their station in society by their own personal merits; for “*Worth makes the Man and want of it the Fellow.*” Of this truth, my fellow citizens be persuaded. The very reputation of your city depends on you—you can render it, by your endeavors, illustrious for its virtue, or notorious for its immorality. Do any of you neglect your work, offend your customers, or sully your reputation, if not, then indeed, are ye superior to any other denomination in the land.

Do you hold that situation in society which your importance entitles you to fill—if not, then take that position which God and man intended you should occupy. Are you fully sensible of the advantageous place you are destined to fill in this favored land? Endeavor first to obtain the respect of your fellow men, then will you acquire self-respect, and it is accomplished. Discharge your duties as citizens, as heads of families, and as guardians with fidelity. Remember there is no hereditary distinction in America; all classes can acquire property by their industry, and they who thus acquire it, will be the most respected. He who is most industrious, will be the most successful, and the elevation of his moral character will secure to him the confidence of the public. An eminent statesman justly remarked: “That mechanic arts restrained men from the commission of crime, by placing within their reach a pleasing employment, with a certain prospect of making them independent.”

Mechanics! When a youth applies himself assiduously throughout the day, has he not strong claims on your protection? Will not the general character of your apprentices increase or diminish your reputation? Be assured that you cannot have a more powerful operator in the improvement of their morals, than a Mechanics’ Library. There youth of general and kindred dispositions meet, their social intercourse strengthens the moral bond of union, the best feelings of the heart are awakened and urge them on to virtue.

Be vigilant, watch over your apprentices, even as you would your own children, in the evening, aye in the night, for ye know not what seductive influence may tempt them on to ruin. Preserve their morals, and in after life they will see cause to bless you for the act; and when you behold them respected in society, from their moral conduct, your hearts will whisper in “a small still voice,” *That they owe to you.* Thus will you be rewarded.

Ye surely cannot be indifferent to the moral reputation of your apprentices. Listen—a fond mother, in generous confidence, entrusted to a mechanic her only son. At the expiration of the term of service, the son was restored to his widowed mother,—but how restored? When he became an apprentice he was young, innocent and happy, but he returned with a broken constitution, an irritable temper, a dissatisfied spirit and a dissipated habit;—when he met his mother it was with chilling reserve—his affection for her was extinguished, he felt her presence a restraint upon his vicious inclinations, and he left her humble dwelling never to return.—What could compensate that mother for the loss she thus sustained? Was the wound inflicted on her heart ever healed? Ah no! Too deep was the wound—it rankled and sent her to an earlier grave.

Do your hearts shrink from this picture of my fancy? Then be it your charge that it never happen.

Public opinion by its force can sustain good morals. Whatever militates against the peace of society, ought from you to receive no countenance. The morals of society are in your power, sustain them, and an ap-

proving conscience will be your best reward. Give your support to the Mechanics’ Association; unite and persevere in the good work, and your efforts will be crowned with success. Would it not be derogatory to your intelligence and the reputation of your city, to suffer this society to languish from a want of united effort in its support? The united exertions of a hundred members would do more good to the cause of morality, than the efforts of a thousand individuals acting without concert, can possibly accomplish. By the science of Mechanics, is meant the power of motion, regulated by geometrical precision. This shows the relation between Mathematics and the Mechanicisms. It is this noble science that renders the elementary principles of nature subservient to the purposes of men. By whom are labor-saving machines invented? By the man who requires their use. By whom are the arts improved? By him, who, suffering from their defects, invents a remedy. He reads; reading teaches him to think; the stores of his mind are increased; he studies his art, and his mind will soon invent an improvement for himself to practice—he takes reason for his guide, and some times profits, as a Newton did, from an accident.

Without the plough and the anvil, what would be the condition of society?

Without the loom and the spindle, what would be the texture of your clothes?

Without the mill, what would be the quality of your bread?

Without the tanning process what would be the state of your leather?

Without the dyeing process, what would constitute the ornamental coloring of dress?

In fact, without the Mechanic Arts, where would be your towns and your cities—your comforts, luxuries and all the elegancies of life? The inhabitants of the air, of the forest and of the sea, would have remained undisturbed in their possessions, had not the mechanic arts devised instruments for their destruction.

Without vessels, where would be your commerce?—And without commerce, on what would rest the hope of christianizing the world?

What a powerful engine the printing press has become, in the dissemination of improvements in the arts. How many inventions have been made known, how many rejected. What infinite advantages have resulted to society from the invention of the printing press alone. The Constitution of Pennsylvania declares, “That the printing presses shall be free.” “The free communication of thoughts and opinions is one of the invaluable rights of man.” “Every citizen may freely speak, write and print on any subject, being responsible for that liberty.” Such is the language of your Constitution.

Newspapers abound in the U. States. They are not subjected to stamp duty, are cheap, and their execution highly creditable to the Mechanic. The demand for newspapers is great, for they are read by all our citizens. Newspapers are the vehicles both of useful and political information. The press in the United States possesses an influence unexampled in other nations.

Mechanics! The world is much indebted to your industry, to your skill and to your invention. How important then is the station you occupy in society.

Scarcely was the axe applied to the trees in the first settlement of Pennsylvania, when William Bradford established a printing press at Kensington, then a flourishing village near Philadelphia. The first paper mill in Pennsylvania was erected in the German settlement, near Philadelphia, as early as 1694. Andrew Bradford published the first newspaper in Philadelphia, on December, the 22d, 1719, called “The American Weekly Mercury.”

Shall I recall to your memory, Thomas Godfrey, the inventor of the Quadrant. He was originally a glazier, but made himself a mathematician; he taught himself Latin, that he might read and study the principles of

Newton, and devoted his whole time to Mathematics, to the prejudice of his health and fortune. He died early in life, and Hadley, an Englishman, had the merit of the invention.

David Rittenhouse, an eminent mechanician, with a mind of superior organization—in 1768, he completed an orrery, which justly ranked with any work of human genius the inventive powers of man ever produced.—With the names of Robert Fulton and Oliver Evans, are associated the present highly improved state of machinery, by the application of the wonderful power of steam. Those gentlemen originated what has since been so successfully practiced. Permit me to extend your attention to those splendid edifices in our state, whose chasteness in design and excellence in execution, will perpetuate the fame of their architects. The Lutheran church, with its lofty steeple indicates that the Lancasterians of an earlier day aspired to distinction. I could mention men of this city, skilled in mechanism, whose names ought to be recorded in her brightest annals, as public benefactors, whose lives are devoted to the improvement of the arts; but delicacy forbids, for they may be present.

Washington, Jefferson and Paine were the political architects of the Rights of Man.

William Penn was the architect of Religious Liberty.

Benjamin Franklin the Literary architect.

And Charles Wilson Peale, the architect of the Fine Arts in Pennsylvania.

Beyond the Atlantic, the American beholds nations which have reached their acme; wherever his eyes rest, a theme for reflection is presented; with reverential awe, he sees the remains of the arts of other years.—Nations and cities, once prosperous, now live only on the historic page. The cities of Pompeii and Herculaneum were buried by lava, in the year 79, and their works of human ingenuity and skill quietly reposed for ages, and were thus preserved from the ravages of the invaders of Italy. These cities have recently been discovered, and denote a height of grandeur, a magnificence in architecture, a purity in design, a skill in execution, and a luxury of living, even in that distant period, that the most enlightened at the present time, would hardly have supposed.

Where is Egypt? Extinct as a nation—her Pyramids, the work of art, survive.

Greece, once splendid in genius and admirable in arts, now abject and debased.

Who is unacquainted with the characters of those distinguished Romans who lived when Rome was free.

Where can you find more pathetic examples of maternal love, paternal affection, filial piety and love of country, than in the brightest days of that republic—they will ever adorn the historic page. When Rome lost her freedom, her virtue also perished; when she lost her liberty, she lost the principle of her vitality.

Which of her degenerate sons, in modern Rome will grace the future pages of her history? Not one. Fellow-citizens, be her fate a beacon for the preservation of your free institutions. Would you behold Egypt—visit her Catacombs.

The arts of Greece have perished—specimens are now only to be found.

The statues of ancient Rome are dispersed throughout the world. In Europe the state of society is widely different from that in the United States. There Monarchs still govern, and there aristocracy still prevails; but the attachment of the peasant to the king has been weakened, the divine right of kings has lost its charm; the people are struggling for their rights; to what cause is this change to be attributed? To the free operation of the human mind in America, to the march of reason; to the influence of our free institutions; to the establishment of mechanic institutes; to the progress of knowledge and improvements in the arts. Man in this happy land is in full possession of all his rights, the chief of which is freedom of religious opinions. Man is

authorised to worship God according to the dictates of his own conscience; this is a security for the performance of his moral obligations, by thus making it his interest to support the Constitution.

The Constitution secures all the freedom of worship necessary for the promotion of the happiness of man, and the safety of the government; therefore the citizen feels conscious of his superiority over man of by-gone years—he possesses the right of acquiring landed property—the right of holding it in perpetuity, and the right of its free disposal. Freedom of election is a vital principle in our Republic. The right of suffrage in a government like ours, is an invaluable right—its exercise gives energy to man and dignity to human nature, and cannot be too highly prized. In the spirit of the Constitution, the rights, privileges and immunities of the citizen, are held sacred, immutable and inviolate, and especially the right of worshipping God according to the dictates of conscience, and the right of voting freely and unbiassed.

Submission to the will of the majority is the basis of all free governments; it is the christian's precept; it is the christian's practice. However excited a citizen may be previous to an election, the moment the result is ascertained, he yields to the popular will, thus constitutionally expressed. Freedom in the choice of those who make and execute the laws, is necessary for our common safety, and the People possess this right. It is a right secured to them by the Constitution—a right that cannot be impaired. The majority who made a law, and the minority who opposed its passage, are all equally bound by its enactments. The minority always submit to the majority. Good order necessarily must result from such an arrangement.

Trial by Jury is the boasted privilege of every American. It was the best feature in the English Constitution, and was wisely incorporated in our own. Trial by Jury is essential to all free governments. Jurors are the judges in all cases, where the life, property, and what is dearer than life, where the reputation of the citizen is involved. If Jurors be selected from the disinterested, and the unprejudiced—from the unbiassed and the impartial, it will tend to the advancement of truth and the promotion of public justice. Such are the privileges that you possess under our inestimable Constitution.

Remember that the independence of the Judiciary is the bulwark of your Liberties.

To whatever part of Pennsylvania you look, improvements are beheld—Arts and Sciences are advancing—a moral influence is spreading over the whole community, which operates silently, but not unseen, most beneficially and wisely.

Man is a social being, a member of a large society; and it is his duty to aid his fellow man as far as practicable. The philanthropist distinguishes himself by his benevolence. The patriot distinguishes himself in his public conduct by his disinterestedness; but every citizen ought to be a philanthropist; every citizen ought to be a patriot.

There is a striking difference between Man and the brute—the brute eats and drinks until he is satisfied, then rests until hunger or thirst require a repetition; but man possesses within him a restless spirit—he may eat and drink, but still he will not be satisfied, he has an indefinable want to gratify, he craves for something for himself unknown—no matter with what talents he may be endowed—no matter with what property he may be enriched—no matter with what popularity he may be attended—no matter how prosperous may be his condition, there will still be a desire to gratify. Such is man! Always pursuing, seldom successful—always wanting, but never satisfied.

Occupation therefore, is necessary for man. Employment is essential for his happiness.

Why is it that mechanics are intelligent? It arises from the arts, compelling them to live in towns and

cities, in social intercourse, for social intercourse promotes a diffusion of knowledge.

Why is it that the farmers in Pennsylvania are more intelligent than those of Europe? The answer is obvious; because they are more abundantly supplied with the means of life, and their education qualifies them to mix in the social circles, in towns and cities, from which they derive both instruction and amusement.

Where every one applies himself to a distinct employment, the people will become civilized, the country cultivated, good roads will lead from prosperous towns to wealthy cities, and commerce, agriculture and manufactures will flourish. Men too frequently desire to be rich—the richest people are not the happiest, and the wealthiest nation is not the most prosperous. The security which government gives to property, renders labor most productive by operating as a stimulus to industry, and invention; hence patent rights ought to be so regulated as to secure to the inventor of any improvement in the arts, the benefit resulting from his invention. If a new process be discovered which renders labor easier and less expensive, the article manufactured can be sold at a less price, and the low price will enable a greater number of persons to become purchasers, and thus the demand is increased. It is capital which gives employment and in a free government like ours, it is good policy to give employment to thousands, in making rail roads, canals, bridges and in the erection of public edifices; capital ought to be kept actively employed; remember too, that credit is capital, and much can be accomplished by its means. What is meant by wealth? It is the power which a man possesses of acquiring what is necessary, useful, convenient, ornamental or curious. The means of employing labor and the means of purchasing the products of labor are necessary in their respective proportions to the prosperous condition of society. The greater the excess of labor above its cost, the greater are the means of accumulation. Instead of leaving your capital remain inactive as it flows in, it ought to be spent as long as its expenditure tends to its increase. Business to prosper must admit of a liberal expenditure, your work shops—your implements, your machinery, your houses, your farms, your vessels, your mills, &c. all must be kept in good order. The price of an article depends upon the quantity offered for sale and the demand; the greater the demand the greater will be the price—the greater will be the profit. It results from this that profit is the true patron of industry; for throw a damp upon a sale of an article and where would be your zeal, your enterprise, your energy or your exertion. There must be no excess of production—if the product of labor exceed the demand—it remains in the houses of the producer to his injury, for if he cannot dispose of the product of his labor—where will be the means to live; a ready sale is therefore necessary to stimulate exertion. The moment a product of labor ceases to obtain money or its equivalent in exchange, such product ceases to be wealth. Labor, therefore, to be productive must produce its value in money or its equivalent. An excess of an article where it cannot sell, instead of a gain is an actual loss. The true interest of labor is to supply the necessities before it attempts the luxuries. As laborers must be fed from the productive capitalist to the productive laborer and he who is fed the best at the least expense will be the most prosperous.

The materials which constitute wealth are in the earth and man by his industry, can transform them into money, by their modification, division or combination, into such forms as to render them susceptible of utility.—That labor will always be the most valuable which is employed in the most useful objects, but works of curiosity, and of ornament will also command purchasers. It was necessary that man should receive an equivalent for his labor; this was coin, but as coin was inconvenient for carriage, bank notes were substituted as its

representatives, and as these retain their credit, so is the mechanic benefited in proportion: a sound national currency being always necessary to ensure the permanency of the nation.

Fellow-citizens! If you only could be made sensible of the blessings you possess, you would hug them with delight, and not lightly throw them from your grasp. Examine the splendid works of creation, behold the innumerable sources of human happiness within your reach, then ask yourselves, if you abstain from a few, a very few, will you not have innumerable comforts left. For be assured, if all are partaken, man's portion in this world, must be misery and ruin, and he who seeks them wilfully, seeks his own destruction.

Take a view of the Internal Improvements in Pennsylvania, behold her canals and rail roads in successful experiment, look at the various useful inventions for the benefit of man, see the emigrants bending their way to the forests, behold the wilderness converted to cultivated fields, and the cabin of the hunter into the substantial farmer's dwelling. And shall we neglect the more important culture of the mind?—that mind which all possess, and which may either prove a bane or happiness. To mothers are youth indebted for the first impulse; "as the twig is bent, so is the tree inclined." The cultivation of Flowers is a pleasing and rational occupation, but judgment is required in selecting the nutriment proper for each plant, if this be adapted, then the plant thrives and a beautiful bloom will be the rich reward. Thus it is with youth—each disposition needs to be studied; some inclinations checked, others encouraged. True, most true is the remark that every distinguished man was indebted to his mother for his advancement. Mothers may learn from this, how much on them their children's future happiness depends.—Check then the growth of weeds in childhood, and cultivate the useful germ—protect their morals; teach them their duties; much depends on obedience; teach them early to obey; require them to be punctual and regular in their habits; and implant it on their minds, that promises ought to be held sacred and neither to be made nor broken lightly.

Mechanics! When you apply for apprentices, you require that they shall be honest, diligent, obedient, and in fact strictly moral. Is it not incumbent on you to keep them moral; remember you have taken them from their parents or their natural protectors, and you now stand to them in the relation of guardians.—This is a highly responsible trust, and ought to be most conscientiously discharged. You enjoy the benefit of their labor. Are they to receive merely clothes and food for their services? Is nothing more required? yes—their future character, their future usefulness depends on you. It is the most critical period of their lives; as you discharge your duty to them, so will their future lives be stained by vicious propensities, or adorned by virtuous inclinations. Far is it from my intention to destroy the heart speaking gaily of innocent youth, but merely to recommend that the exuberant spirits be restrained within prudential limits. I know the youth of Lancaster—I know that they possess kind, warm, and grateful hearts; but youth are not perfect, nor can they be expected to possess a greater share of prudence than naturally falls to their lot. However excellent their dispositions, by your counsel or negligence, they may be diverted to good or evil, according to the character of their companions. Remember that a competent knowledge of your business, will never compensate for the loss of morals; that these youth may be husbands and fathers, and therefore, they should possess the requisite qualifications for domestic happiness. Whatever, therefore, can best preserve or improve their moral character, ought to have your approbation. If the Mechanics' Library can in any degree tend to such a result, then is it incumbent on you to encourage it by your example, your influence and your purses. It is impossible to be engaged in the transactions of the

society, without imbibing a portion of the moral principle by which it is influenced, and without acquiring a deeper sense of its practical utility. Example is a school for man, and some men will learn in no other school.—The example has been set, let it be followed, and strength will be given to your ordinances, and your city will be respected abroad, for its moral reputation. Teach youth under your care, liberality of opinion—to think justly of all men, and not to persecute any man, for either his religious or political opinions; but above all things, to beware of the exciting subject of slavery. Be it your task to instil into the youthful mind the peculiar tenets of your sect to which you respectively belong—but beware! plant no prejudice against others; remember that religion teaches us to love one another; its professed object is to unite all mankind in one harmonious society. Guard youth, therefore, from imbibing a spirit of intolerance, excitement, and persecution in religion. If the library contains any books that would produce an action unfriendly to these principles, let it be your duty to remove them, lest they excite a spirit of resentment or hostility, which is incompatible with true religion. This is an age of improvement, and though much has been acquired, there is still much to learn. Chemistry is every day explaining mysteries of nature. Americans have surpassed all foreign competitors in the march of enterprize. Inventions are constantly made known through the medium of the press. *Silliman's Journal of Arts and Sciences*, has sustained a high reputation in Europe and in America. It excels in usefulness, all other publications of a similar object. *The Mechanics' Magazine* is a periodical of good repute, and worthy the perusal of the mechanician. *The Journal of the Franklin Institute* is conducted with ability, and always can be consulted with profit. Inventions and improvements in the arts, are made known through these popular publications. These works in your library, can always be examined by the youthful mechanic, who seeks for instruction with advantage. The apprentice ought to have access to every publication connected with arts, (I was going to say) that he may learn what genius has done for man; rather, let me say, what industry and skill have enabled man to accomplish, for genius too frequently misapplies her talents. Man, however learned, may be an unfit instructor for youth. Few, very few possess the requisite talent. The teacher who can communicate his thoughts, so as readily to be understood by his pupil, will ever be the most successful. As this remark applies to teachers, so also to books. It is not every writer who can make himself understood, therefore judgment is required in the selection of books for the library. These being adapted for the improvement of the apprentice, he will enhance his reputation, by an increase of knowledge in his occupation, and industry will enable him to overcome each opposing obstacle, and success will yield him that tranquility of mind, which is always enjoyed by the architect, of his own fortune. Occupation is the genuine secret of human happiness. Youth require occupation, for if not employed usefully, they may be engaged to their disadvantage. Let them avoid the society of the depraved, the idle, and the immoral; vice in youth is frequently captivating, lovely and attractive, but in old age hideous, deformed and repulsive. By making use of the library, a beautiful world is expanded to view, new thoughts are created in the mind, the mental powers expand and elevate the soul, and a youth becomes a thinking being, and endued with reason; under the operation of a reflective mind, he is tremblingly alive to all the wonders and mysteries of creation. Let him also read and instruct himself in the art in which he is engaged—with an ingenuity to invent, skill to execute, ambition to excel, and perseverance to conquer, he must succeed. He who performs his work best, at the least expense, and with the greatest expedition, will be the most successful. He who raises the most pro-

duce of the best quality, at the least expense, off an acre of ground, is the best farmer. Young lads, be not content that you perform your work equally well with that executed by your father; endeavor to improve and you may become a public benefactor. Theory can do much, but practice can accomplish more. The books which can now be placed in your library, will make the present generation wiser than the last.

Have our artists, manufacturers and mechanics lost any portion of their skill, their industry or their experience? Has cotton, wool or flour deteriorated in quality? Is money less plenty? To these I answer—no.—Labor saving machinery have been improved by American ingenuity. Our manufactories are conducted consistently with health, cleanliness and convenience. Mechanics are not deficient in exertion, for the productions of their labor improve each year; but an increase of patronage may stimulate to still further exertion; for patronage operating upon the spirit of industry, will eventually raise this city to still greater prosperity.—We are deeply interested in your success, and we cannot dissolve the connection. We can neither encroach on, nor deprive you of any portion of your privileges. Let us then remember the good maxim, “never to forget the claims of so meritorious a portion of our fellow citizens upon our patronage.” What would avail it with all your boasted improvements in the arts, if you could not dispose of the products of your labor? Let each and all of us endeavor to remove every impediment to the progress of industry, and encourage the cause of the Mechanic. Be it your part to hold in remembrance that the price of an article manufactured ought to depend upon its being made of the best materials, in a workman-like manner, at the least expense, and with the greatest expedition.

The city possesses a large population, industrious and enterprising; the houses are mostly from one to two stories in height, combining neatness with comfort; the manners of its inhabitants are plain, kind, social, and affable; the arts flourish and the city prospers. It is surrounded by a country highly cultivated—fruitful as a garden, yielding an abundance of excellent and cheap provisions. These constitute your wealth and your strength.

For what manufactures is Lancaster famous? The superior excellence of her Rifles—the strength, beauty and comfort of her Mail Coaches and Rail Road Cars—the Carding Machines invented by an ingenious mechanist of this city—the superior excellence of her Snuff. But in what manufacture I would ask, is Lancaster deficient? This city is peculiarly adapted by the industry and spirit of its mechanics, by the minerals in its vicinity, and by the fertility of the surrounding country, to continue prosperous. Marble is abundant; it is as ornamental as it is useful, and a highly necessary ingredient in the formation of architectural beauty, capable of improving the taste of the mechanic, by calling into action the inventive powers of his genius. Iron is one of her staples; this most useful and valuable of all our metals, has been manufactured into almost every form that human ingenuity could invent, for the necessity, convenience and comfort of man.

May none of us live to behold the time when the busy noise of the forge shall have ceased, and the furnace lay mouldering into ruin. Possessing a vast territory—superior to every other county in wealth and in fertility—bounded by a majestic river, and interspersed with numerous streams, some of which have been rendered navigable; with an important rail road running through the heart of the county—turnpikes affording avenues for the conveyance of commodities to various markets—rendering the intercourse between this and the neighboring cities easy, cheap, expeditious, safe and comfortable—abounding in minerals, with a soil highly improved by the skill of the farmer, yielding whatever is necessary for the support of man, with

a large surplus for foreign demand. Such are your resources, Fellow citizens, which if judiciously employed, are calculated to raise your city to a height of prosperity hitherto unexampled. I invite all of you to unite in effecting so desirable an object. Fellow citizens! Give your children such an education, as will render them moral, prudent, industrious and economical.—That their feelings may be softened, by encouraging and awakening the kindlier affections of the heart. In conducting moral education, the prevailing bias of the disposition must first be ascertained, then exercise the most useful and active talent, correct what may mislead, eradicate what may prove destructive, and explain, in clear, intelligent and familiar language, what is profound in the researches of reason, and luxuriant in works of imagination. As education is encouraged and fostered, so will the general good of society be promoted. Wherever it has a distinguishing character, a moral influence pervades the whole community. It is apparent in the good order that is prevalent—the tranquillity of society—the incitement to industry—exemption from riots—respect to persons in authority—the various courtesies of life, and all that can render a people prosperous and happy. Seminaries of education have a powerful tendency to benefit the operative class, by the moral influence which they exert; it is exerted in implanting habits of regularity and order in the youthful mind, with moral principles, and by the diffusion of useful knowledge; far and wide is their modifying power experienced; it is deeply felt and candidly acknowledged. View the United States, behold her Philosophers, her Poets and her Historians, her Statesmen dignified by wisdom, her Orators pre-eminent, her brilliant Naval reputation, her Soldiers chivalrous, her Lawyers eminent, her Physicians skillful, her Writers of popular renown, her spirit of enterprise, her improved state of agriculture, the advancement in activity of her manufactures, the facility of intercourse between each portion of our extensive Union, the rapid accumulation of capital, the innumerable institutions of learning and of benevolence, the energy of action, the integrity of purpose, the dignity, the ease, the industry, the zeal, the veneration for our republican institutions, obedience to the law, exemption from taxation, and the enthusiastic love of liberty which beats in every bosom, and animates each heart throughout the land. To preserve these advantages you possess, it is necessary that you should obtain a knowledge of all your rights and privileges, as individuals and as members of society, and that you should be convinced of the absolute equality of all men, in the eyes of God, with a due respect for all persons in authority, and that these truths should be early and solemnly impressed upon the youthful mind. You ought to extend your views beyond the sphere in which you move, and participate more or less in those transactions which relate to the whole Union; this will embrace political knowledge with its application to the internal and external condition of the citizens of each state. You can obtain correct knowledge of past and present events, by an attentive perusal of the histories of the Colonies, American Revolution and United States. Read the lives of our most eminent Americans, the ablest expositions of the Constitution of the United States, and the best works on Political Economy, by which the resources of your country may be turned to your profit. Various circumstances influence the desire of knowledge—food and clothing, exercise and rest, labor and amusement, companions and change of scene, all operate on the mind, for strength of body gives energy to character, and firmness to principle which excites admiration and commands respect. The energies of genius, the discoveries of science, and inventions in the arts, give the mind a strength of feeling, and an intensity of thought, beyond the common level of humanity. For whatever is majestic in the works of art, or sublime in those of the Deity, whatever attracts by its beauty or astonishes

by its grandeur, whatever dazzles by its splendor or enchants by its harmony, must be symphonious to the soul. It is useful to give youth an insight into all the phenomena of nature, and the laws by which they are governed; for by engaging their attention in the pursuit of truth, the disposition is prevented from fixing itself on base, low, unworthy or insignificant objects.—If they examine the works of creation, contemplate the exalted character of the God whom they adore, investigate the infinite divisibility of matter, or the immensity of space, the wonders of the Microscope, or the powers of the Telescope, the geological formation of the globe, or the motions of the luminaries in the heavens, all lead the inquiring mind to look “through nature up to nature’s God.” By reading the lives of men who have been the instruments of overturning governments, establishing communities, founding empires, liberating nations, reducing kingdoms to abject submission, rescuing men from slavery, promoting the arts and sciences, youth are supplied with standards of comparison, by whom they can estimate their own public characters.

Let those to whom the responsible duty is committed of superintending the library, exercise due vigilance in the selection of works of imagination, watching their influence, and preventing that influence from operating to the injury of the youthful mind; but let them beware, let no preference to one branch of human knowledge, no mistaken zeal for the eternal principles of morality, no fear of giving too wide a range to the mental faculties, induce you to suppress them altogether.—It is your duty to direct, but not to destroy, the luxury of the intellect, for that would be to rob language of its richness of expression, and all its magnificence and grace; to take from nature all the evanescent tints with which the poet’s genius invests her beauty; to forbid each fibre of the soul to vibrate with delight; to melt with sympathy, glow with all the dignified energy of feeling, or suspend every motion in a thrilling pause of awe, while the deeper tones of sublimity rest upon the chord of life. The path to eminence is open to every youth, and his success will be in proportion to his opportunities, to his zeal, to his ambition, and to his diligence. Books are the reflection of the transactions of real life, and the man who is a stranger to the various passions and propensities which are apt to agitate the mind in the active pursuits of the world, will seldom acquire that strength of thought and vigor of expression, which is the result of close observation, due discrimination and sound experience, derived from an active study of men and manners, in the busy concerns of life. It is to the establishment of civil liberty, to the continuance of national prosperity, and the desire of securing to the mechanic, the profits of his industry, that our country is indebted for the improvements in the arts. You will perceive, that nothing which has relation to the moral improvement of youth, can be a matter of indifference, and that he is not to depend on one occupation alone, for his future usefulness and prosperity; improvement of the mind is the employment of our whole life, and the mechanic who is satisfied with the knowledge he possesses, and neglects to avail himself of the library, where he may learn the inventions in the arts and discoveries in science, will experience the heavy mortification of seeing his business taken from him by a younger, but more judicious competitor. The productive power of the mechanic is his invention, and not his strength, and it is only from an union of an art with science that the most useful works of mechanism are accomplished.—While all the splendid works of arts of other years and of other climes, are hastening into obscurity, those of enterprising Americans are wafting on the stream of time, with a reputation ever blooming, and a celebrity that will never perish.

Members of the Mechanics’ Association! This is a society making age, and societies are easily formed, be their objects what they may, one sometimes daz-



zles us with the lustre of its light, but becoming gradually more and more dim, it sinks into oblivion, until the revolving year reminds its officers of their existence.—Your society had an auspicious commencement, its design was useful, and you all were disposed to give it your patronage, such was your zeal, that a stranger would have concluded that it would have outstript every competitor in its race of usefulness. Has this been the case?

Yet the very object of your association is of such vital importance to the reputation of your city, as to require the aid and co-operation of every mechanic.—Found a Mechanics' Institute, hold lectures on subjects connected with the arts and sciences, instruct the young, improve their morals, correct their taste; the mechanic who is most conspicuous in the cause, will prove the greatest benefactor of your city. A Mechanics' Institute, formed on the basis of popularity, must be productive of general good. It offers no encouragement to evil. It offers on the contrary, an incentive to moral action. It is admirably calculated to promote among mechanics, a liberal spirit, which ought always to be cherished as the best supporter of our republican character; a spirit of lofty independence, resulting from an honest confidence in their native powers.

Youth will soon acquire a more elevated mode of thinking, from the comfort of a moral and useful employment of their leisure moments, by a book or a newspaper, they will become impressed with their superiority over their former idle, giddy and thoughtless companions of the street. A love of order will naturally lead their thoughts to the formation of good habits, and means for their preservation, and by them will their future lives be regulated.

The youth who foolishly declines the privilege of the library, cannot expect to receive the same encouragement, or make the same improvement in his occupation as he who employs his leisure hours in the study of the arts, and elevation of his morals, by useful books from the library; for the first will lose the confidence of his employer, while the latter will be sure to win, not only the confidence of his employer, but that of the public. Experience forcibly proves that apprentices are not always governed by prudence in those moments when they are free from employment, and though they may be disposed to industrious exertion, frugality and temperance, when no temptation presents itself to their notice, yet when temptation is presented, it too frequently happens that they cannot practice self-denial, and they fall sacrifices to enticements to do mischief, which they had not courage to avoid. The streets generally abound, especially in the evening, with the gay, the thoughtless and the unsuspecting, but connected with these, may be found the inhumane, the mischief-maker, and the Sabbath-breaker, these by their boyish pranks, offer strong inducements to idleness; and haunts of dissipation are ever open to receive the unsuspecting, in those hours when they are free from employment; and health and reputation are destroyed, from the want of the superintending care of their employers.

A spirit of mutual accommodation in the sacrifice of inclinations and feelings on the part of the mechanic and the apprentice, parent and child, husband and wife, promote union, and strengthen family ties, and the interests of society. The want of mutual accommodation interferes in the domestic tranquillity of a family, by casting a chilling restraint upon that familiar and social interchange of frank opinions which exist in every well regulated establishment. The respectability and happiness of individuals have been destroyed by suffering a petty irritation of feeling to grow to one of serious magnitude. Beware, then, and condemn no trifles—let no trifling opposition discompose the temper—while the wound is fresh, it can readily be healed—suffer it not to mortify by a continued series of irritating opposition, but yield in time, and thus preserve

your respect and influence. Mutual concession secures harmony.

Mechanics! As guardians to your apprentices, prevent them from forming bad habits, win their confidence, secure their respect, obtain their affection, thus will you acquire an influence which you can readily exert for the safety of their morals, encourage a desire for information, incite them to read useful books, make them fond of home, by rendering it attractive! If home be made agreeable, they will not desire to seek further for unprofitable amusement, secure an interest in their hearts, and you may safely lead them on, in the path of rectitude. What more delightful compensation would you wish than such a bright prospect of their future respectability and usefulness in life. If youth attend the library regularly, a visible change will be produced in their habits, a generous confidence in their virtuous principles, will be enkindled in their hearts, a noble spirit of emulation will be generated in the minds, and each of them will be distinguished for temperance, frugality and good conduct. If such be the facts, then come forward, in the support of the association, give it the sanction of your names, your zeal, and your example. From a union you have every thing to hope and nothing to fear. If all opinions be not reconciled, at least unite all hearts is so good a cause. Look upon your apprentices as human beings, possessing the same feelings and the same interests as yourselves. May the genial spirit of charity breathe in your bosoms, peace and good will to the young.

Let no selfish consideration, no narrow policy, no mistaken views, no unfounded prejudice, no fear of the future, no imaginary defects, prevent you from joining the association. Beware how you nurse that pernicious and fallacious maxim in your bosoms, "that two of a trade can never agree;" wipe it from your escutcheon, be liberal, be just, and may your city become the residence of science and of arts, and may the approving smile of the Great Architect of the Universe, encourage your exertions for the future welfare of the young, that when we shall quietly repose within the tomb, the Mechanics' Library Association may still flourish, and be the happy means of classing your children, and your children's children, with the estimable, the liberal and the good.

#### TO THE COMMISSIONERS OF THE SUSQUEHANNA CANAL COMPANY.

Gentlemen:—Having pursuant to your instructions, made a reconnoissance along the eastern bank of the Susquehanna river, from Columbia to the Maryland Line, with a view to ascertain the practicability and probable cost of constructing a canal between those points, I have now the honor to report to you the result of my labours.

The character of the Susquehanna valley below Columbia differs essentially from that above. Instead of a river having a moderate descent, and bordered with extensive ranges of bottom, or flat lands, which afford favorable ground for a canal, as is the case above Columbia, the river below is found to be rapid in its descent to tide water, and for about two-thirds of the distance to the Maryland line, it washes the base of precipitous rocky hills, varying in height from one to three hundred feet above the water surface. The river bank is naturally rough, and presents several rocky points, which form prominent obstacles to the construction of a cheap canal; yet the difficulties to be encountered are not as great as common report has represented them, and I take pleasure in assuring you that it is entirely practicable to construct a permanent Canal upon the route examined from Columbia to the Maryland Line.

Commencing at Columbia, the line is carried over ground tolerably favorable for a canal about four and a half miles, (passing the villages of Charlestown and

Washington) to the head of *Turkey Hill*, where the shore becomes abrupt, and continues so to the Maryland line, with the exception of five or six intervals, varying in length from one-quarter to one mile each, where narrow flats occur, which are favorably adapted to the proposed level of the canal, and will materially serve to balance the expense of the more formidable obstacles to be encountered on the route.

The face of the river hill, along the basis of which the canal must be constructed, rises generally with an acclivity varying from 30 to 45 degrees, but in several instances the rocks rise vertically from the water surface to the height of fifty or sixty feet, then fall back with a slope of from five to ten degrees, for sufficient width for the canal. These points, however, are few, and I am pleased to say, short in extent. It is worthy of remark, that with the few exceptions above alluded to, the entire extent of the hill presents at its base a favorable, although rough surface of solid rock, from one to ten feet above the river, for the foundation of a permanent protection wall. And in but one or two single instances, will it be necessary to base the wall in the water. The river has in all cases sufficient fall to allow of the canal being located above the reach of the highest freshets, if it should be thought advisable to do so, and the bank is decidedly more favorable for preserving a high level, than a low one—which will tend materially to facilitate the construction of the work.

From the head of *Turkey Hill* to the Maryland line, the river hill is composed entirely of *gneiss rock*, which is of a nature easy to quarry, and without difficulty, wrought into suitable forms for building heavy walls. Indeed, but for this characteristic in a rock which abounds to such an unusual extent along this line, the practicability, or at least the expediency of constructing the canal, might well have been doubted. For if, in addition to the great amount of rock excavation required, it had been necessary to procure stone from a distance for the purpose of walling, the cost of the work would have been extended beyond the amount of capital that could ever have proved productive. Fortunately, however, this is not the case. The materials of an excellent quality for the required walls are found both abundant and convenient; and the fact of the hill slope, which is in most cases covered with a light coat of earth, and a heavy growth of timber, will yield in common, a sufficiency of coarse materials to form the rough exterior of the embankments.

Considerable difficulty will be experienced in obtaining lining for the interior surface of a large portion of the canal. It cannot be found along the shore, or hill face, and must therefore be procured through the aid of chutes from the top of the hills, which will necessarily render it a heavy item in the cost of construction. This is however, by no means a novel method of procuring lining; it has frequently been resorted to with success upon other canals.

The only streams of importance which flow into the Susquehanna, upon the route examined, are the Conestoga and Pequea—both of which it is proposed to take into the canal as feeders. Several small streams are crossed on the route, viz: Luquow, Muddy, Fishing and Peter's creeks, all or either of which can be taken in, or passed under the canal, as may be deemed most expedient.

The whole length of the Canal from Columbia to the Maryland line, is twenty-nine miles, and the fall, or lockage 157 feet. Its cost will be found by reference to the annexed estimate in detail, to be, (if constructed with single locks,) \$1,710,000

Or with double locks, (which I would decidedly recommend,) 1,817,587

This estimate has been made out with much care, from notes taken during the examination, at each sixteen rods in length of the entire line, and liberal allowances have been made for walling, rock, lining, em-

bankment, locks, bridges, dams, culverts, and all other work likely to occur on the line.

Having personally superintended the construction of some of the heaviest work upon the Pennsylvania canals, I am enabled (from a careful comparison of the difficulties there encountered, with those which are found on the route of this canal) to present the estimate with full confidence in its sufficiency to complete the canal in a permanent and workman-like manner; and also, to add the assurance, that if the work is commenced during the present summer, and urged with proper diligence, it can be furnished during the autumn of 1837, or, at latest, in readiness for the opening of spring navigation in 1838.

Notwithstanding the unusual expense attendant upon the construction of this canal, I cannot close this report without expressing my opinion, that when completed, its value as a source of revenue to its stockholders, will fully equal that of any other improvement of the same length now extant in this country. Indeed, few enterprises, at the present time, offer to capitalists as fair a prospect of reward for stock invested, as the proposed Canal from Columbia to tide water.

If this assertion is doubted, I would respectfully refer such as doubt to the map of Pennsylvania, where a single glance at the district of country watered by the Susquehanna and its tributaries, should be sufficient to convince any one (at all acquainted with the unbounded resources of the State, to be found in her mineral and agricultural productions, and in her immense forests of valuable timber,)—that this canal, the natural outlet of a splendid system of State improvements has only to be completed, to prove immediately productive.—The route of the proposed canal itself is far from being destitute of the means of contributing towards its own support. The Conestoga navigation, (extending from the Susquehanna river to the city of Lancaster,) has upon it a large and valuable amount of water power, which, with the trade incident to a rich, fertile, and populous country, will render this improvement an auxiliary to the canal. The extensive lime stone quarries and iron works in Pequea valley, and the slate quarries at Peachbottom, will also serve to increase the amount of its revenue.

As the examinations for the proposed canal terminated at the Maryland line, I would here remark, that it will be necessary to extend the work from one half to one mile, so as to connect with the Maryland Canal. An enlargement and improvement of that work should also be made, so that the entire Canal from Columbia to tide, may form a perfect work, of equal dimensions with the Pennsylvania Canal.

It was originally my intention to have given in this report a detailed description of all the prominent obstacles to be encountered in the construction of the Canal from Columbia to the Maryland line, together with the method proposed for surmounting them, but as other duties have interfered to limit my time, and as such a statement more properly belongs to a definite location of the work, I have omitted it, and hasten to present you the preceding remarks, together with the accompanying estimate, in the hope that they may afford you the information desired.

All which is very respectfully submitted,  
By your obed't. serv't.

EDWARD F. GAY,  
Civil Engineer.

Lancaster, June 5, 1835.

Columbia, June 10th, 1835.

At a meeting of the citizens of this Borough, held at the house of Francis Boggs, on the 9th instant the Committee appointed at a former meeting produced a report from E. F. Gay, Esq. Civil Engineer, together with a draft or map of a route for a rail road avoiding the inclined plane at this place altogether. Also, the entire practicability and utility of laying rails on the

graded road between this place and Portsmouth, via Marietta, Bainbridge, Falmouth, &c.—when

It was on motion, Resolved, 'That the said Committee have so much of the report as relates to the route from the Canal Basin to Mount Pleasant, published for general information. But the Board of Managers of the Marietta, Bainbridge, Falmouth and Portsmouth Road Company have this day noticed that part of the report which relates to their road, in a call for a special meeting of the stockholders, to adopt such measures respecting it as they may think proper—this meeting deems it inexpedient to take any further notice of it.

Lancaster, June, 6th, 1835.

To Messrs. Boggs, Wright, Odell, Mullison, Cochran, Green and Cooper—Committee on behalf of the Citizens of Columbia.

Gentlemen—Agreeably to your request, examinations have been made of the route for the contemplated rail way from the village of Mount Pleasant, to the borough of Columbia, with a view of avoiding the use of the Columbia inclined plane.

It is found to be entirely practicable to construct a rail way upon the route examined, at a grade not exceeding thirty-four and one half feet per mile, and within the distance of five and a quarter miles from the Canal Basin. The general direction of the line, is highly favorable, and the soil along it is well calculated to form a good road, but a number of wide and deep ravines intersect its course, which will serve to render the grading expensive.

As other engagements prevented me from being present during the instrumental examination of the route, I would respectfully refer you for a detailed description and estimate of the cost of the line, to the annexed statement furnished by Wm. K. Huffleagle, Esq. Assistant Engineer, to whose care the survey was entrusted, and to whose industry its early completion is to be attributed.

Having recently passed over, and examined the entire line, and having also reviewed the estimate, which has been made out with much care, I am enabled to present you, both the estimate and the accompanying Map of the line, with full confidence in their accuracy. The estimate contemplates the grading for a double track—the superstructure to be of wood, made in the best manner, and plated with iron; the whole sufficiently strong, to admit a general use of Locomotive Engines upon it. Should the Legislature deem it expedient to allow the superstructure (of that part of the rail way belonging to the Commonwealth and contiguous to the proposed route,) to be removed, and laid down upon the graded surface of the new line, its cost will be reduced to \$110,000.

Very respectfully submitted,

EDWARD F. GAY,

Civil Engineer.

It will be observed that E. F. Gay's report contemplates removing the present track of rail way from Mount Pleasant to the foot of the plane, which must be done one track at a time, after the road formation is completed, to prevent the interruption to travelling. This includes that part of the road where the contemplated road from Marietta would have joined it—but by avoiding the plane by the alteration, and extending the rail road from the Canal Basin to Portsmouth, Marietta will be accommodated with a rail way without the expense of making one, which may be rendered useless by this alteration; and by this change the Commonwealth would gain at least one hundred thousand dollars, which the annual expense attending the stationary Engine, &c. at the plane costs them more than the expense of making the alteration in the road. There is little doubt but that the Legislature will order the altera-

tion to be made, if for no other reason than to avoid the plane, which will give general satisfaction.

The whole distance from Lancaster, via Columbia, Marietta, Bainbridge, Falmouth, Portsmouth, &c. to Harrisburgh, is about 39 miles, as short a route, and can be completed in much less time, and at one-fourth of the expense than Harrisburgh can be approached from Lancaster, by any other route over which a rail road can be made.

On behalf of the Committee,

FRANCIS BOGGS,

Chairman.

E. GREEN, Secretary.

# UNITED STATES BANK.

Principal items in the monthly statement of the U. S. Bank for 1st June.

Loans on personal security,	31,761,154 45
bank stock,	1,402,286 71
other securities,	5,624,351 41
	38,787,793 57
Domestic Bills of Exc.	24,854,852 47
	63,642,646 04
Baring, Brothers & Co.	1,890,753 79
Specie,	13,912,577 47
Redemption of Public Debt,	282,896 09
Treasurer of the United States,	510,999 14
Public officers,	1,016,665 89
Individual deposits,	10,549,197 56
Circulation,	22,009,474 40
Due from Banks,	4,000,153 49
Due to State Banks,	4,691,857 79
Notes of State Banks,	3,018,066 45

	Philadelphia.	Boston.	New York.	Baltimore.
Personal Security,	3,549,287 62	2,358,992 59	5,562,530 84	1,522,993 05
Bank Stock,	372,770 90	34,888 89	435,700 00	134,460 00
Other Security,	3,996,280 04	12,500 00	917,957 92	50,200 00
Domestic Exchange,	7,918,338 57	2,406,381 48	6,934,188 76	1,507,653 05
	1,970,503 68	2,660,160 41	2,104,828 81	144,432 32
Due from State Banks,	9,888,842 25	5,666,541 89	9,099,017 57	1,652,085 37
	826,507 78	124,720 68	721,186 68	109,388 22
Due to State Banks,	705,090 56	125,264 34	1,362,378 65	326,177 47

From the Pittsburg Gazette.

### ALLEGHENYTOWN.

A few mornings ago, I rode over the aqueduct, through Allegheny, and around its suburbs, spending a pleasant and profitable hour in admiring and reflecting upon the wonderful magic by which it has been raised to its present flourishing condition. As I seldom visit it, I have been very little in it for the last 4 or 5 years. I could not help but admire its present beauty; its delightful scenery; its elegant and highly finished private dwellings, and its numerous gardens, now robed in all the loveliness of nature's summer foliage. As I rode through it, admiring its advantageous position, improvements, extensive and profitable manufacturing establishments, its present large, industrious, and flourishing population, its beautiful location for a large city, as it must soon be, with its vastly increasing means, and ratio of population. I could not help but revert to its former contrast in the days of my boyhood. Then, in the autumn and fall of the year, I used to visit its present site for the purpose of gathering wild fruits, nuts, &c., which abounded within its present limits, when there were but two or three small log cabins and fishermen's huts in the whole space now occupied by the town, in addition to the residence of the late Mr. James Robinson, now occupied by Wm. Robinson, Jr. Esq., who is the first white man born on that side of the Allegheny river. When the space now occupied by the Western Penitentiary was covered with grape vines, plum, black hawes, hickory, walnut, butter-nut trees, and hazle bushes. Wild game was also abundant, and this was the favorite haunt of our sportsmen. Then the youth of our city were attracted in crowds upon the week and Sabbath days especially; and every person then living in Pittsburgh remembers "Black Jack's immense Water and Musk Melon patches," on the brow and top of the hill, just behind Allegheny town, where the mass of our city used to promenade for "fun and frolic," and where many a Sabbath day was spent improperly and profanely. Now, what a contrast and pleasing change! Where the youth, the idle, and thoughtless, used to misspend the sacred Sabbath of the Lord, we have now a Theological Seminary, seven churches, and two more about to be erected, 12 to 15 Sabbath schools, perhaps as many day schools, a large industrious, and moral population, exceeding 5,000, and rapidly increasing. How heart cheering and great and glorious is the change in this place in a very few years; and yet still greater changes are to be expected in it in a very short time from its many local advantages, running parallel to our thriving city, on the banks of the pure Allegheny river, with the debut of the great Pennsylvania Canal in it, and passing through it, connected with Pittsburgh by a large and excellent bridge and aqueduct, surrounded with the best coal and purest water, and a virtuous, industrious, and enterprising population, Allegheny, like its near neighbor and parent, our city must continue on its onward march most rapidly.

With delightful feelings, and with our noble destiny and onward march to wealth, and usefulness, and honor resting in my mind, I was returning, at an early hour, when I was met by an immense mass of industrious, happy youth, just emerging from a large cotton factory to their homes and breakfasts—this pleasing sight broke my reverie, and at once disclosed the grand secret, the *magical art* by which Allegheny has risen, as well as that by which all individuals, towns, cities or countries rise, and become flourishing and happy, viz: honest industry, prudence and economy—agriculture, manufactures, commerce and enterprise, judiciously managed, is fast raising our city and all our surrounding towns, country, and nation to a high and noble destiny.

With these thoughts and cogitations, I returned to my own "*Sweet Home*," lost in wonder at the great

change of Allegheny town since the days of my boyhood, when I was literally *lost in its woods*.

A PITTSBURGHER.

THE FRANKFORT SPRINGS.—We publish, to-day, a letter from Frankfort in relation to these valuable Mineral Springs. We are pleased to learn that improvements are making there for the accommodation of visitors.

The writer of the letter, however, ought to have known that he was writing in "Beaver," not "Washington" county.

Frankfort, Washington co., }  
Penn., May 27. }

Mr. Editor.—You will, perhaps, confer a favour on some of your city readers, by informing them that Mr. Duncan of this place is erecting a large and elegant building, which will be finished by the first of July next, for the purpose of accommodating persons visiting the Mineral Springs in this vicinity. The house is of brick, three stories high, with a porch on each side. From the upper story of the front porch the prospect is beautiful; of itself it is worth a ride from the city.—Mr. M'Ginness, the proprietor of the springs, is also prepared to receive boarders as usual. The better way for you Mr. Editor, would be to let the political world take care of itself for a few weeks and come and see for yourself. What think you?

Respectfully, yours, &c.

A READER OF THE ADVOCATE.  
Pittsburgh Adv.

## THE REGISTER.

PHILADELPHIA, JUNE 20, 1835.

### STRAWBERRIES.

GETTYSBURG, Pa., June 15.

We were presented on Friday last, with a delicious Strawberry from the garden of Alexander Russel, Esq. of this borough, which measured  $3\frac{1}{4}$  inches in circumference.

The above was no doubt a fine Strawberry—but at the late exhibition of the Horticultural Society, were plates full of quite as fine, and many still larger—a plate from the Garden at the New Almshouse in Blockley, contained some which were measured by gentlemen present, and ascertained to be 4 inches in circumference. They were called "Keen's Seedling,"—and were cultivated in the above garden, by Mr. William Graham, who informed us since, that had the exhibition continued another day, he would have exhibited still larger of the same kind, which he afterwards found. We take this opportunity to notice the splendid collection of flowers, fruits and vegetables, exhibited on this occasion, by the Horticultural Society—and to say, that in extending patronage to it, the public are encouraging the production of fruit and vegetables of the finest kinds, and thus are promoting their own interests and pleasures.

Printed every Saturday morning by WILLIAM F. GEDDES, No. 9 Library street. >

The publication office of the Register has been removed from Franklin Place, to No. 61, in the Arcade, West Avenue, up stairs.

# HAZARD'S REGISTER OF PENNSYLVANIA.

DEVOTED TO THE PRESERVATION OF EVERY KIND OF USEFUL INFORMATION RESPECTING THE STATE.

EDITED BY SAMUEL HAZARD.

VOL. XV.--NO. 26.

PHILADELPHIA, JUNE 27, 1835.

No. 390.

## AN ADDRESS,

DELIVERED BEFORE

THE LAW ACADEMY OF PHILADELPHIA,

On the sixth of May, 1835.

BY WILLIAM RAWLE, Jr. Esq.

One of the Vice Provosts of the Academy.

*Gentlemen of the Law Academy:*

The objects of the Institution, whose exercises are now about to close for the season, being the advancement of those studies and the cultivation of those habits which tend to form its members for the profession they have chosen, the most appropriate theme for an occasion like this, would be the nature of that profession, its studies, its duties, its difficulties, its hopes and its rewards. A theme so appropriate and so pregnant with topics calculated to elevate the thoughts, to rouse ambition, and to give a youthful and aspiring mind, that direction, which, if diligently pursued must lead to distinction, could hardly have escaped the attention of those who have preceded me in the duty I am attempting to perform.

The necessity for close and unremitting application to the studies immediately connected with the profession, and the best methods of overcoming the difficulties by which they are surrounded; the advantage of mingling with severer pursuits, those of elegant literature and classic reading; of invigorating the intellect and enlarging its boundaries, by exploring the avenues of history, and investigating the *arcana* of science, in aid of a profession, which, in its practice, may touch almost every part of the circle of human knowledge; the doubts, the fears, the anxieties, which, after the novice of the student has expired, hang over the prospects of the practitioner's early career, and the bright gleams of hope, which from time to time break through the gloom, animating his exertions and restoring his energies; the duties which he owes to himself, to his client and the community in which he moves; the high moral and intellectual qualities which enter into the character of an accomplished lawyer, and the brilliant rewards which crown the efforts of him, who, "never weary with well doing," steadily pursues the path upon which he has entered, neither deterred by the difficulties he finds in his way, nor drawn aside by the allurements which lurk in its borders, have already, more than once been set before you, in a manner calculated to kindle your hopes, to stimulate your exertions, and successfully to direct your course. The field is indeed extensive and its products rich, but were I to attempt to follow those who have gone through every part of it, and reaped its abundant harvest, I should gather only the few scattered ears which they have suffered to remain upon its surface, adding little to the stores they have laid up for you, and exhibiting only the poverty of a gleaner. Leaving then the high road which you have already travelled with so much advantage, with those who have heretofore led your steps, let me invite you to enter one of those beautiful walks immediately connected with it, adorned with flowers, and decorated with every thing which tends to enliven

and advance the journey you have undertaken—Let me recommend to you the cultivation of eloquence.

The reproach that the profession of the law narrows the intellect, and prevents improvement in popular speaking, however well merited it may be in another hemisphere, has no room in this. It is not my business to vindicate the character of the English lawyer from the aspersions, which some writers of his own country have cast upon it, but if it be true that few examples are to be found in the history of the English Bar, of comprehensive and varied knowledge, of largely developed mind, and of rich, powerful and cultivated eloquence, the reason for these deficiencies may, perhaps, be discovered in the nature of the pursuits of the English practitioner, and of the studies by which he qualifies himself for them. Wherever the labourers are numerous and the divisions of labour minute, a high degree of perfection is attained in that part of it to which the attention of the individual is particularly directed; but the effort absorbs nearly all the power of his mind, leaving little to be applied even to other branches of the art. Thus it is in some measure in the profession of the law in the land: our ancestors. The extent of her population, and her wealth, renders the law, particularly that portion of it which relates to real estate, complicated, and its professors numerous. In the excess of competition, few can hope for success, without close application and pre-eminent merit in the business they undertake. Even family interest and patronage, which exercise so controlling an influence in the army and the church, can do little to advance the fortunes of him who seeks the distinctions of the Bar. They may furnish opportunities for the display of merit, but they can give to him who does not possess it, no hold upon public confidence. With a favouring gale, they may waft his bark from the shore, but whether she shall make a prosperous voyage, or sink into the sea of oblivion, must depend on his skill to direct his course.—In no profession does success so much depend upon actual merit; in no profession is there so little room for the arts of the charlatan, as in that of the law, in all its branches. Always before the public, subjected to the jealous scrutiny of his brethren, and exercising a calling intimately connected with the dearest interests of society, it is scarcely possible for the lawyer long to veil his real character, or to long enjoy an unfounded reputation. Hence the various branches of the profession, instead of being blended as they usually are in this country, are broken into distinct divisions, each calling for a distinct set of practitioners. The whole presents a magnificent garden, embellished throughout with every thing which its soil can be made to produce; but this exquisite culture is the result of undivided labour upon each particular portion of it, bestowed by a separate class of labourers, having generally very little knowledge of what exists beyond the immediate limits of their own allment. The attorney and solicitor, confined to the mechanical parts of the profession, and the conveyancer buried in the dark intricacies of that system, which an artificial state of society and complicated family arrangements have introduced, may attain a point of perfection in his own department, seldom found in any member of the profession here, but he will

have little opportunity to pursue its more liberal branches, less to cultivate elegant literature, and none for the exercise of popular speaking. In the more elevated walks too of professional life, the same oppositionment of the vineyard will be found. He whose duties call him into the Court of Chancery is seldom heard in those of the common law; and he who enjoys an extensive practice and commanding influence in the King's Bench, is known only by reputation in the Common Pleas. This limited sphere of employment, necessarily induces a limited range of thought and of study, and begets a sameness and poverty of manner, altogether incompatible with fulness of ideas, richness of language, and the graces of delivery. The immense mass of business, with which the dockets of the English courts are loaded, is another impediment to public speaking. The time of the court is so precious, that none can be spared for what is not absolutely necessary for the dispatch of business. A cold, dry, argumentative manner, consequently characterises the speaking of Westminster Hall, for he who turns aside to "catch a grace," is immediately recalled to the beaten path which leads directly to the point under discussion. Having little time for the attainment of enlarged knowledge, and little opportunity either for the cultivation or the display of eloquence in his own profession, it cannot excite surprise, that when the English lawyer is translated to another scene of action, he should be found deficient in those qualifications which are essential to distinction. His inability to cope on the floor of Parliament with those master spirits by whom its history is illustrated, has often been the subject of invidious remark. The reproach is in a great degree merited, but the causes which give rise to it are sufficiently obvious. Unfavourable however as is the atmosphere of the English courts for the growth of eloquence, there are many bright examples of its successful cultivation, sufficient to redeem the whole profession from the sentence which has been passed upon it. There have been some

"Who on the tip of their persuasive tongue,  
Carried all arguments and questions deep;  
And replication prompt and reason strong,  
To make the weeper smile, the laugher weep:  
They had the dialect and different skill,  
Catching all passions in their craft of will."

ERSKINE was a lawyer: and if in Parliament, he disappointed those, who from his brilliant career at the Bar, anticipated success no less brilliant as a legislator, yet the powers of his mind, the splendour of his imagination, the copiousness and force of his language, and the fervor and persuasiveness of his eloquence, displayed throughout his forensic life, abundantly vindicated his profession from unmerited obliquy, and established for himself a reputation, which

"Per omnia sæcula famam  
(Si quid habent veri vatum præsagia) vivat."

MANFIELD was a lawyer, whose enlarged and luminous mind spread light upon every subject on which it shone; and although none of his speeches at the Bar, and few of those which he delivered in either house, have been preserved in such a manner as to convey an adequate idea, either of the gracefulness of his style or the powers of his eloquence, yet the character of the "silver tongued MURRAY," both as a forensic and parliamentary orator, is scarcely inferior to that by which he adorned the elevated station of Chief Justice of the Court of King's Bench.

ROMILLY was a lawyer; mild, placid and dignified, his eloquence was as chaste, persuasive and impressive, as his mind was pure, enlightened and philosophic.

BROUGHAM is a lawyer, whose varied knowledge and bold and powerful eloquence enabled him to give full scope to an intellect which grasped and mastered almost

every thing it touched, and not only secured to him extensive practice in this profession, and a commanding influence in the councils of the nation, but placed him on the Woolsack, the most exalted station in the gift of his sovereign.

It is unnecessary to produce other examples of illustrious men, the force of whose talents and acquirements has broken the trammels by which the profession is fettered in our mother country, and nobly vindicated the character of that profession from the charge of being inconsistent with liberal learning, enlarged intellect, and true eloquence.

The disadvantages, however, under which they laboured, have no existence in the country in which your lot has happily been cast. Free from the operation of those degrading distinctions of rank which measure a man, not by his moral and intellectual qualities, but by the circumstances in which accident has placed him, and strive to bind him down to the position in which he was born; with all the avenues to distinction open before him, and no obstacle to impede his march except collision with rivals pressing forward to the same point, no country ever presented such golden prospects, such captivating and magnificent rewards, to the persevering, the enlightened, the eloquent, and the aspiring lawyer, as that happy land, which we proudly call our own. It is the Paradise of lawyers. In every department of the community in which talent is called for, they are to be found, and the very prejudice, which unfortunately exists in some minds against them, is the most flattering, though certainly not the most agreeable tribute which can be paid to their merit. In all private and public institutions, of religion, of learning, of benevolence, of commercial enterprise and public improvement, in all the associations in which men unite, for the advancement of a common object, the influence of the profession is fully felt, if scantily acknowledged. In the legislative halls of every state in the confederacy, and in both branches of our national councils, the voice of the lawyer is heard, and carries with it a power which nothing can resist. The delicate duties and the high honors of diplomacy, and even the most exalted station in the power of a free people to confer, have drawn more from the ranks of our profession, than from those of all others united. To enumerate those members of it who have risen to distinction, would be, with few exceptions, to read the catalogue of illustrious men whose names are emblazoned in the history of their country. And to what is to be ascribed the enviable pre-eminence they have thus attained? The great engine by which they have raised this mighty fabric of influence and usefulness, is eloquence, which has enabled them to sway the passions, to direct the prejudices, to influence the judgment, and to master the will of mankind. Thus it has ever been in those countries in which the popular voice has given the direction to public affairs. It was eloquence which raised PRISTATUS, the first who made the Athenians bend to its influence, to sovereign power; and the splendidly accomplished PERICLES, governed the destinies of the same refined and intellectual people, less by the arts of the politician and the skill of the commander, than by the force and persuasiveness of the orator. But the story of their lives, while it affords a striking example of the power of genius, supported and brought into action by the force of eloquence, furnishes a sad and salutary lesson upon the abuse of the best gifts of the Creator. They enslaved their country, and the glory which encircled their names, is shrouded and darkened by the reproach of selfish ambition.

In this country, every thing tends not only to stimulate the cultivation of the art of public speaking by the rewards it proposes, but to facilitate its improvement; and so long as we retain that patriotism and independence of mind which have heretofore marked our national character, we shall have no cause to apprehend the fatal consequences which in other climes have

sometimes attended the possession of popular talents—Painting and eloquence are plants of so different growth in our soil; but while the former increases and sickens in its native atmosphere, the latter is made to flourish, invigorated and brought to healthy maturity. The names of West, Corley, Austin, Leeson, and many others, assert the undeniable claim of America to genius in the arts; but our free and equal institutions deny to it that fostering patronage, without which it cannot flourish, and it is compelled to seek in another hemisphere, under the sunshine of the hereditary wealth and refined luxury of a liberal aristocracy, the social influences which are necessary to make it blossom, bear fruit and ripen. But those institutions and habits of life which are so hostile to the success of the painter, are calculated to develop the powers, to advance the studies, and to form the character of the orator. However obscure his birth and humble his condition, the boy who feels his bosom throbb with the divine impulses of genius, and is conscious of his strength steadily and perseveringly to pursue its direction, knows that there is nothing too brilliant for his hopes, nothing too exalted for his aspirations. His heart does not quit it under the frown, or wither under the contempt of acknowledged superiors, and the icy influence of family power, cannot "freeze the genial current of his soul." His spirit bold, independent and unbribed, carries him forward in spite of the puny efforts of envious opposition, to check his career.

The school in which a youth such as I have described enrolls himself, is a lawyer's office, where alone he can expect to pursue those studies, to form those habits, and to find those opportunities, which are to lead him to the objects for which he hopes. It is a school admirably fitted not only to instil into his mind that learning which immediately belongs to his profession, but to imbue it with those principles, and to fill it with that knowledge which will enable him, at a future period, to wield and to work, the most powerful engine in a republican country. Unrestrained to any branch of study, by being destined to make that branch of the profession to which it appertains his future pursuit, the whole volume of legal science is laid open to him, and he must read it, because in the exercise of professional duty, he will be called upon to apply almost all its precepts. The common law in all its modifications, the principles and practice of courts of equity, the civil and the ecclesiastical law, should be as familiar to him as "household words," for they all enter into the practice of the American lawyer. Connected with these, a deep and accurate knowledge of history, particularly of that of Great Britain, some acquaintance with the useful and even the elegant arts and sciences, familiarity with polite literature, and more than all, profound and frequent study of that sacred volume, from which are drawn not only the purest precepts of morals, and the divine duties of religion, but the richest and most abundant supplies of thought and language, are necessary to enable him successfully to perform the varied duties of his calling. All these objects may and ought to be pursued, in connection with his legal studies, during the probationary term of the student. With a mind thus prepared by previous discipline, he comes to the Bar, and mingles in those contests, which call forth his strength and exercise his powers. Obedient to embrace every variety of professional employment, every variety of professional talent is called into action. This diversity of objects to which the mind is applied, if it prevents that perfection which is attained by the pursuit of a few, tends to enlarge and improve the general intellect, and is particularly propitious to the cultivation of eloquence, the most valuable talent the American lawyer can possess. He who overcomes the intricacies of the science, stores his mind with juridical learning, and makes himself familiar with its practical application, but neglects that art by which the heart is moved and the understanding convinced, may claim the

merit of a sound head, but not a fitting up the rewards of a successful profession. He cannot hope either for an elevated position, or to sustain the exalted character of his profession. He must be "content to dwell in domestic obscurity." To carry with him public feeling and public opinion, on which alone his reputation and success are built, and to rise to that eminence to which he ought to aspire, he must not only possess the treasures of his profession, but be capable of displaying them to advantage. He must "make his light shine before men." The value of the diamond is unknown and unappreciated, until it is unburied and made to sparkle to the eye. Depth of learning, soundness of judgment and skill in the management of business, will secure the confidence of those who are benefitted by these valuable qualities, and gradually enlarge the sphere of professional action; but if they be enfolded by the persuasive and controlling powers of eloquence, full effect is given to what might lose part of their value, from not being properly brought into notice. Nor does the lawyer depend upon the favorable opinion of his immediate clients, or of those in whose circle they move, alone for advancement. He is before the public, who will judge of him by the manner in which he exhibits himself to them. Few have the opportunity or the capacity, to appreciate those powers, however great, which are exercised in the shade of the office, or shown, even in the skillful conduct of a cause in court, but all within the range of the speaker's voice may be enlightened by his arguments, touched by his pathos, delighted by his imagination, captivated by his graces, and carried along by the torrent of his eloquence. Such powers invariably command success. The importance then of cultivating this irresistible talent, cannot be too strongly impressed on the mind of the student.

But what is eloquence? It would degrade its exalted character to lend its name to that flippiness of speech, which indicates little more than the conceit of the speaker, or to that empty and showy declamation, which substitutes sound for sense, and glittering gewgaws, and tawdry tinsel for real jewels and sterling metal, or even to that artificial rhetoric, formed upon the rules of art, which springs neither from the operations of the mind nor the workings of the heart. The foundations of true eloquence, are a generous spirit, a pure heart, a sound head and extensive knowledge. "*Est eloquentia sancti religionum rerum, fundum mentis, sapientia.*" The same great authority from whom this sentiment emanated, himself the most illustrious example of the art he commends, declares that every virtue and every species of knowledge are necessary to constitute the character of an accomplished orator. To require so much, is to place the object beyond the reach of human effort. But it is obvious, that the farther we advance in the path he points out, the nearer we shall approach to that which is too high ever to be reached. In the constitution of a forensic orator, a thorough acquaintance with his profession, and with all those branches of knowledge which are ancillary to it, is an essential ingredient, as well as full preparation for the particular cause in which he is to speak. Without these, even the powers of native and cultivated eloquence will be exercised in vain. He who possesses them, may enjoy a short lived reputation and ephemeral success, but real eminence and permanent distinction, are reserved for him who unites the attractions of the orator, with the solid and enduring qualities of the lawyer. The greater the depth from which it is drawn, the purer and more refreshing is the stream. That eloquence which is most felt and produces the greatest results, is bold, manly, and impressive; clear in conception, fervid in expression, energetic yet dignified in action; the eloquence, not merely of language or manner, but of thought and feeling. The rounded periods, the beautiful imagery and the graceful delivery of the artificial orator, may please the ear, amuse the fancy, and command the ad-

miration of the hearer; but they leave no lasting mark; the impression is effaced almost as soon as it is made, and the speaker and his subject, are alike soon forgotten. He bursts forth "like a bright exhalation in the evening," and like it, he falls and is seen no more. Even the splendid rhetoric of ISOCHATES, "*pompe magis quam pugna aptior*," made little impression; while amidst a corrupt and fickle people, the bold, impassioned and natural style of DEMOSTHENES, embodying vigorous thought in the strongest language, disdaining the pursuit of vain ornaments, but seizing those happy illustrations which spontaneously presented themselves to his mind, borne down the subtle sophistry of all who opposed him, and the whole host of venal orators, backed by the wealth and power of PHILIP, trembled and crouched under the terrors of his voice.

Let it not be supposed however, that language and manner are to be disregarded. They are the channels through which the thoughts and feelings are to be poured forth, and as they are shaped the stream will flow. The importance of these attributes of eloquence, was appreciated by none more highly than by the great Athenian orator, the champion of his country's liberty. They should however, always be in accordance with the character, the cast of mind, and the mode of thinking and acting of the speaker. He who assumes the "trappings and the suits" which belong to one of a different form and stature is made awkward and ridiculous, by what confer grace and ease on their appropriate wearer. Hence the constant failure of those, who vainly striving to form themselves upon some popular model, neglect the development of those talents and the improvement of that species of eloquence, which properly belong to themselves. He who by nature possesses a free elocution, a sprightly fancy and an easy and graceful delivery, will speak with effect, because he speaks according to the impulses of his nature; but he who captivated by these glittering displays and popular applause which they command, omits to inquire into the character of his own mind, and the efforts of which it is capable, pursues a phantom he can never grasp, and exhausted in the chase, falls short of the point, which a just direction of his own powers, would have enabled him to reach. Imitation is the bane of excellence. As was said of the servile imitators of GARRICK, "those who always fol'ow, can never get before." A manner, whatever it may be, which is natural, and in unison with the character of him who employs it, will produce greater results, than the most successful imitation of the best model. Strength of intellect and force of character, are indicated by independence of thought and action; while slavish imitation is an unerring denotement of conscious inferiority; for he who borrows from another, acknowledges that he possesses nothing of his own. Whatever is done naturally, is in general done well, and it is only by violating nature and attempting to assume what she has denied to us, that we show our weakness and make ourselves ridiculous. Vanity may induce one to believe that he has transferred to himself some portion of that admiration justly bestowed upon him whom he attempts to follow, and even to imagine that what he has stolen from another, belongs to himself; but the deception does not extend beyond him who practices it. Those who witness his awkward efforts, are aware of the cheat, and like the poor daw in the fable, he is ultimately exposed to ridicule and contempt. The effort therefore of every one who looks for eminence, should be to ascertain as far as possible the tone and character of his own mind, and the manner in which it can be most effectually brought into active operation. The diligent and persevering cultivation of the powers he feels himself to possess, and the display of them in a manner easy, natural and unaffected, will make him more truly eloquent, than the closest imitation of the most brilliant orator.

But nature is not in this respect, to be left entirely to

herself. She gives the material, but it is to be worked up into the best form, by him on whom she bestows it. Without strenuous and untiring efforts to improve them, her choicest gifts are bestowed in vain. The vine which left to itself creeps upon the ground or straggles wildly over bushes and brambles, when pruned with judgment, and trained by the hand of taste, delights us by its beauty, and protects us by its shade.

It is a source of the most encouraging and pleasing reflection, that no faculty is more susceptible of improvement, than that of public speaking. The genius of the poet, is the inspiration of nature; but the orator is in a great degree the work of his own hands. Diffident, embarrassed and sinking under the weight of his early efforts, if he has courage and perseverance to go on, he finds his strength increase, his faculties develop themselves, and his success far beyond what he ever hoped for. There are few sensations so delightful as those which attend the conscious expansion of the youthful mind, as light breaks in upon it, new ideas are generated, and the intellect is gradually unfolded.—These emotions are not unlike those which are experienced, as the powers of speaking are developed, improved, strengthened and confirmed. Without referring to those examples of successful struggle with difficulties, whose celebrity has made the subject trite, many instances might be pointed out in our own country, and even without going beyond the limits of our own Bar, of those who from the most unpromising beginnings, have become effective and successful, and some of them eloquent and powerful speakers. Let then the success of others be an encouragement to those, who feeling the difficulties they have to encounter, are disposed to shrink from the exertions by which alone they can be overcome.

It has been too often supposed, that the character of a profound lawyer is inconsistent with that of an accomplished and brilliant speaker. The suggestion is a slander not only upon the profession, but upon the human mind. The most stately and magnificent edifices are erected upon the broadest and most solid foundations, and the most abundant and fertilizing streams are poured out of the deepest reservoirs. How can the plant which springs from a meagre and arid soil, produce fruit either beautiful to the eye or pleasant to the taste? Professional erudition is one of the parents of professional eloquence, and he cannot be said to be truly master of his art, who does not possess both.—Such a combination, it is true is rare, and can only be the result of great natural gifts, cultivated and improved by close study and unwearied effort. But that such a happy combination may exist, there are too many examples to be denied. A single one is sufficient to illustrate the truth of the position. PINCKNEY was as deeply skilled in all the varieties of legal learning, even in its most technical branches, as he was rich and elegant in language, exuberant and splendid in imagination, and fervid and imposing in delivery. It may be long before our halls shall again re-echo to eloquence like his; but the example of his labors and his success, may stimulate others to follow his footsteps, and to emulate his fame. In the Supreme Court of the United States, even the wisdom of that august tribunal was enlightened and instructed by the depth of his research, the clearness and logical precision of his arguments and the force of his reasoning; while the torrent of splendid and impassioned language which he poured forth, glittering with beautiful imagery and shining with the happiest illustrations, astonished and delighted all who heard him. His star has set, but the effulgence of his memory remains, the valued inheritance of the profession to which he belonged.

To that profession you also are destined to belong, and upon you will devolve the high duty of upholding its character. Capable of subverting the noblest purposes, and of being perverted to the worst use, its estimation in the public mind and its operation upon the



interests of society, must depend upon the conduct of its members. Integrity, purity, honour, extended knowledge and cultivated intellect, will secure to it that influence and respect, which hitherto it has justly claimed. Looseness of principle, trick, chicanery, neglected or ill directed talents, will not only consign the individual to whom such blots attach, to merited contempt and detestation, but sink and degrade the body of which he is an unworthy member. He who actuated by a generous ambition, without disregarding the duty which every man owes to himself and to his family, of securing an independence, makes honor and distinction the stars by which he shapes his course, will add jewels to the professional crown; but he, who prompted by the meanest passion of the meanest mind, makes the acquisition of wealth the darling object of his heart, commits a professional sin, which no professional talent or acquirement can redeem. He may receive external homage from those who acknowledge the truth of the maxim, that "faults that are rich are fair," but he can create an interest in no bosom but his own; and should an adverse wind blast his fortunes, those fawning flatterers who "lingered their knees, and let his very breath blow off their caps; praised his most vicious strain and called it excellent," will rejoice and triumph in his fall.—Avarice sucks up every generous impulse, and withers every noble effort.

Your profession has a right too, to claim from you scrupulous attention even to manners and personal deportment. Lightness, flippancy and frivolity; sarcasm, bitterness and ill temper; reserve, distance and hauteur, though they mark minds of widely different characters, alike interfere with the advantageous exertion of the best talents; while dignity, simplicity and kindness, accompanied by the independence of conduct, without which no man is respectable or worthy, create a disposition to promote the views and advance the fortunes of him who possesses them.

Nor are the qualities to which I have referred without a direct influence upon the successful exercise of that branch of professional talent, the cultivation of which I am endeavoring to urge upon you. The effect produced by the speaker will always be proportioned to his personal dignity, moral excellence and weight of character.

To point out in detail the course of study, and to indicate the exercises most conducive to success in the pursuit recommended to you, is unnecessary and would perhaps be improper. The sources of instruction are abundant and accessible, and there are few which promise more effectual aid to him who is determined to excel, than close attention to the duties, and assiduous performance of the exercises, of this excellent institution.

From the Pittsburgh Gazette.

#### ORPHAN ASYLUM.

At the 3d annual meeting of the Orphan Asylum Society of Pittsburgh and Allegheny, held at the room of the Young Men's Society, on the 12th of May, 1835, the Rev. Dr. Herron was called to the Chair; the business of the meeting was opened with prayer, by the Rev. Mr. Elliott, when the following Report of the Managers of the Society was read and adopted:

The Managers of the Orphan Asylum Society, in presenting to the friends and patrons of the Institution, the third annual report of its concerns, would express their grateful acknowledgments to the Father of our mercies and God of all grace, for the kind protecting care with which He has encircled this object of your benevolence. It is not necessary here to recapitulate from what scenes of misery, want, and degradation, your helping hand has rescued many of the children now before you. Look at these interesting groups—their cheeks glowing with health, and their eyes sparkling with gratitude to you, their benefactors. Compare

them, in your minds, with the squalid vagrants who infest our streets, worse than fatherless and motherless—whose parents are living examples of vice and infamy—for whose precarious subsistence they beg a scanty pittance from your doors, and you will feel that your benevolence has not been misapplied.

The Orphan Family consist of twenty three children. During the past year, they have been visited with more cases of disease than formerly, yet as few as could be expected from the accession to their number and the neglect and suffering which preceded their admission. In the summer, Cholera Morbus and other complaints incident to children and the season; and in the course of the winter, ten or eleven were attacked with Measles, but all terminated happily. Hitherto, it has not been "the will of our Father in Heaven that one of these little ones should perish;" the destroying angel has never yet been permitted to visit our Asylum. Twelve have been received, and four have been bound to respectable places since our last report.

In giving an account of our stewardship, we would first advert to the favors received. How much we are indebted to the Reverend Clergymen who have aided us by appropriate sermons and contributions in their respective congregations, can only be estimated by contrasting their charities with the diminution of our subscription list. This falling off has been to us a subject of painful solicitude. To what can it be attributed? We appeal to you, our friends and fellow citizens—your hearts have not grown cold to the child of sorrow—you could not turn a deaf ear to the wailings of a desolate infant—you would not say to the tattered, shivering, famished orphan, be ye fed and be ye clothed, then go your way without providing either food or raiment. We believe you have no reason to doubt the judicious application of the moneys committed to our trust as admoners of your bounty—our accounts are annually the subject of your investigation, and at all times open for your inspection. For the last twelve months, our subscriptions and donations have amounted to \$445 97 only, while the expenditures of the year for house rent, maintenance of the family, including the salaries of the matron, teacher, &c. have been \$621 30, as exhibited in the Treasurer's report. We cannot, for a moment, admit a suspicion that your sympathies are chilled, nor can we rest satisfied without ascertaining, if possible, the cause of this apparently lessening interest. May it not proceed from a wrong impression that we have accumulated a permanent fund which renders us independent, and precludes the necessity of annual supplies? If so, the error must be corrected.—Our treasury is in your bosoms. Our permanent fund is that benign, unwasting principle in the hearts of our fellow citizens, which is strengthened by the assurance that "it is more blessed to give than receive." The Board cannot here omit an expression of their deep sense of obligation to Dr. Dale, whose professional attendance has been promptly, faithfully, and gratuitously given, under all circumstances when requisite, from the first opening of the institution to the present period. We also thankfully acknowledge the benefit given by the "Allegheny Musical Society."—And here, justice, as well as gratitude, requires the notice of a donation of fifty dollars, contributed by a few gentlemen, the friends of David and William Sproat, in 1833—which, by an oversight, was not communicated to the Secretary for the report of that year.

The purchasing committee have also reported donations in provisions, clothing, medicines, fuel, &c. &c., from various sources, for which liberality we are sincerely grateful. For the good order of our establishment, and improvement of the children, we will say nothing, but invite you to visit the Orphan House and judge for yourselves. While this institution was yet struggling into existence, during a period of its greatest need, the benevolent regards of the late Mr. Mary O'Hara were liberally extended to its aid, nor were

these helpless objects of her bounty while living, forgotten in the closing scene of their generous benefactress. Mrs. O'Hara, by her last will, directed to be conveyed to the Pittsburgh and Allegheny Orphan Asylum Society, a lot of ground in the vicinity of the city, valued at \$2,000 which has been faithfully complied with by those who have the charge of her estate. This legacy will hereafter teach the stranger that in generations past there was one, whose heart was the seat of human loveliness, and who was the Orphan's friend. The dew drops of the morning, while they glitter on the rose bud reflecting the brilliant sun beam, are softening the petals and assisting the expansion of the flower until all its parts are fully developed and its fragrance is under proper culture, may not only exhale a healthful moral influence here, but beyond the limits of this frail being continue to expand, "Through endless ages into higher powers," withhold not then, we beseech you, those little annuities, which, in the aggregate, like rain drops running together, form a stream of benevolence of vital importance to the Orphan Asylum.

Mary Robinson, Treasurer, in account with the Pittsburgh and Allegheny Orphan Asylum Society—balance from last year, viz:

Proceeds of Fair in 1833, (now loaned on interest)	\$1800 00
Cash on hand,	205 12½—\$2005 12½
Donations and subscriptions received during the past year,	445 97
Collections in churches during the past year:	
1st Presbyterian Church,	115 31
2d do. do.	39 00
Dr. Pressly's do.	24 72
Methodist Episcopal do.	31 00
Rev. Mr. Kerr's do.	54 56—264 59
Allegheny Musical Society,	71 63
Proceeds of Fair, December 31, 1834,	437 60
Interest on money loaned,	108 00
	<hr/> \$3332 91½

Cr.—By amount of current expenses, including house rent, matron's salary, and household expenses,	\$ 621 30
Amount invested on interest to be appropriated towards building a permanent Asylum,	2400 00
Cash on hand, to be appropriated in same way,	311 62½
	<hr/> \$3332 91½

The meeting then listened with deep interest and instruction to an eloquent and feeling address, delivered by the Rev. Dr. Lacey, on the obligations of charity, and the claims of the destitute orphan to its bounties.

A brief and appropriate address was then made by the Rev. Mr. Elliot, and the Society proceeded to the election of Managers for the ensuing year, when the following ladies were chosen.

Mrs. Harmar Denny,	Mrs. Montgomery,
" L. Halsey,	" Sellers,
" Upfold,	" W. P. Irwin,
" Wm. Robinson,	" Young,
" Bruce,	" Wm. Hays,
" Wade,	" M'Cormick,
" M'Clure,	" Mason,
" Campbell,	Miss Herron.

It was *Resolved*, That the thanks of this meeting be delivered to the Rev. Dr. Lacey, for the address just delivered, and that he be requested to furnish a copy for publication.

May 15th.—The Managers of the Orphan Asylum Society met this day and proceeded to the election of officers, when the following persons were elected:

1st Directress—Mrs. Denny;  
2d Directress—Mrs. L. Halsey;  
Treasurer—Mrs. W. Robinson;  
Secretary—Mrs. Campbell.

*Resolved*, That as the receipts from subscriptions during the past year were insufficient to defray the current expenses of the orphan family, committees be appointed to call on the citizens of Pittsburgh and its vicinity, and solicit their increased and prompt aid.

From the U. S. Gazette.

#### CITY COUNCILS.

The following petition was presented to Councils at the meeting on Thursday evening last, and referred to the Finance Committee with power to act.

#### To the Select and Common Councils of the City of Philadelphia.

The memorial of the Board of Managers of the Philadelphia Exchange Company, respectfully represents:

That your memorialists on the 17th day of January, 1834, borrowed from the city, as trustees of Wills' Hospital, forty thousand dollars, on an interest of 5½ per cent, secured by mortgage on the Exchange building, redeemable in 5 years. Exclusive of said building the company have a property on the south side of Walnut street, which cost eighteen thousand dollars.

The funds of the Company not being sufficient to meet all their engagements, certificates of loan were issued for nearly twenty thousand dollars, which your memorialists are now desirous of paying off, by obtaining that additional sum on mortgage, and the only difficulty in procuring the whole sum of sixty thousand dollars, is the mortgage to the city, as capitalists object to loaning on a second mortgage.

They therefore respectfully request permission to pay off the said loan made to the company from the Wills' Hospital. They have however understood, that a sum of nearly twenty thousand dollars, belonging to the trust funds of the Wills' Hospital is uninvested, and should it be preferred to increase the mortgage now held by the city from forty thousand dollars to sixty thousand dollars, it would meet the wishes of your memorialists. They beg leave to submit the annexed statements, and remain respectfully,

W. YARDLEY, Jr.

WM. D. LEWIS,

SAM. COMLY,

ST'PN. BALDWIN,

On behalf of the Board of Managers.

Philadelphia, June 11, 1835.	
Cost of ground plot	\$98,000 00
" of Exchange building	184,000 00
" of property on south side of Walnut street	18,000 00
	<hr/> \$300,000 00

Principal of ground rents	23,000 00
Stockholders	206,700 00
Certificates of loan	19,700 00
City of Philadelphia	40,000 00
Balance of rents and subscriptions, after paying current expenses, which have been applied to buildings	13,000 00
	<hr/> 302,400 00

The annual income and expenditures are estimated as follows, viz:

#### RECEIPTS.

Amount of rents	11,400 00
Subscriptions to Reading Room	9,000 00
From letters and sales at auction	1,000 00
	<hr/> 21,400 00

## EXPENDITURES.

Interest on \$60,000 at 5½ per cent	3,300 00	
Ground rents	1,380 00	
Taxes	800 00	
Salaries and wages	2,900 00	
Newspapers and postage, fuel, oil and incidental	2,400 00	10,780 00

Balance for stockholders \$10,620 00

About five per cent on \$206,700 00—amount of stock.

We some time since called the attention of our readers to some experiments of speed on the Paisley Canal, and now extract the following notice of a similar experiment at Rochester, N. Y.

## UNPARALLELED SPEED UPON THE CANAL.

On Saturday, some forty or fifty of our citizens took a ride upon one of the new line Packet Boats, designed to run between this city and Buffalo—The boat is made considerably narrower than the ordinary packets; is exceedingly light, and finished in the most elegant manner. It is a sample of the workmanship of our enterprising fellow citizen, S. C. Jones, who has for some time, we understand, being of opinion that a boat might be so constructed as to be drawn by horse power, at the rate of 10 or 12 miles to the hour. The test on Saturday was a delightful realization of the fact. Although the horses were unaccustomed to the business, and for four or five miles of the distance, were exceedingly fractious and hard to manage, the ride was completed in two hours and thirty-four minutes, a distance of twenty-four miles, including changes of horses and a short stop at Spenser's Basin.

It is found by experiments, that when the boat is propelled at the rate of seven and a half or eight miles to the hour, it rides upon the swell, creates less commotion in the canal, than the common packets at 4 miles to the hour, and requires, we believe, about the same power to draw it. An enterprising company has been formed to run a daily boat of this size to Buffalo, leaving Rochester after breakfast and going through by daylight, a distance of ninety-five miles! This will be "going ahead," on the "rail road principle," and those who are going from this to Buffalo, or from Buffalo here, we think it will not be difficult to say *how* they will go. —*Rochester Democrat.*

From the U. S. Gazette.

## THE WEATHER.

During the last eight days, the weather has been variable. On Monday, Tuesday and Wednesday mornings, a little fire would have felt comfortable. On Friday evening, the 12th, the whole atmosphere was highly charged with electric fluid, attended with some thunder and rain.

On the 13th, during mid-day, the mercury stood at 84.

On the 14th, cool, and showery during the day.

On the morning of the 15th, very cool, mercury at five o'clock, had sunk to 53, and during the whole day it could not get above 70, which is six below summer heat.

On the 16th, at 5 o'clock, mercury 55, but at mid-day it rose to 74.

On the 17th, at 5 o'clock, mercury 59, but it rose to 74.

On the 18th, at 5 o'clock, mercury 60, but rose to 76 during the day.

On the 19th, at 5 o'clock, mercury 65, but rose to 85 during the day.

## WEST BRANCH DIVISION.

## REPORT OF J. D. HARRIS, ENGINEER

CANAL OFFICE, JERSEY SHORE, }  
October 30th, 1834. }

To William F. Parker,

Superintendent of the West Branch Division Pennsylvania Canal.

SIR—In obedience to the directions of the Board of Canal Commissioners, as communicated in the letter of their Secretary, dated the 9th inst. I herewith transmit to you the tabular statements exhibiting the details of my annual report, in relation to the upper division of the Lyeoning line.

In complying with the usual requisitions of the Board, at the close of the year, it gives me pleasure to congratulate you, and all friends to the success of this branch of the State improvements, on the completion of the whole line to its junction with the Bald Eagle creek. And although this event, so long looked forward to as an epoch in the history of this portion of the State, has not transpired so early by about one month, as was hoped and expected at the date of my last annual report, yet the work has been consummated in time to admit of the passage of the water throughout the whole length of the line before the setting in of winter, and to afford an opportunity to make such test of the work as justifies the belief that the exertions on the part of the State agents to construct the work in a permanent manner, have not been misdirected.

The water was first admitted into the Bald Eagle side cut on the 4th of July. It has been in constant navigable order since the first of September, and it already begins to give evidence of its importance to the neighborhood, in the traffic which has been commenced between the coal mines and the Bald Eagle valley, chiefly in the transportation of Coal to the Bald Eagle, and in carrying back iron, pigs, castings, lime, agricultural products and merchandise.

The water was admitted into the canal through the guard lock at the feeder dam, on the 15th of September. Owing to the dryness of the weather, when the water was first admitted, and its continued dryness up to the present time, the process of filling the canal has been tedious. The quantity of water let in has been governed by a due regard to the safety of the banks; and it was thought better to submit to censure for over-caution in admitting the water, than to incur the risk of breaches, by letting in a full supply at once. The water has therefore been admitted so gradually, that all defects in the banks might be detected and secured before filling the levels. The supply of water drawn from the feeder dam has been gradually increased, and in such ratio as appeared safe under existing circumstances. The depth of water admitted into the canal at the guard lock is now four feet eight inches, which is passed principally through the paddle gates. It is proposed to increase the depth in a few days to five feet, by opening the large gates of the lock. It may not be improper here to remark, that the average capacity of this canal considerably exceeds that of the Pennsylvania canal generally. In all cases where it could be done without much additional expense, it has been widened beyond the ordinary breadth. A great portion of this canal is forty-six feet in breadth at water line, instead of forty, the usual breadth. This fact is stated in order to give some idea of the quantity of water required to fill a canal of this dimension, as compared with others of less capacity.

Subsequently to the date of my last annual report, the feeder dam of the Lyeoning line has been completed, and judging from the slight effects produced by the floods which have taken place since its completion, there is no reason to apprehend that the advocates of this structure will be disappointed in relation to its permanency. With regard to the chute of the feeder

dam, its loudest opposers are obliged to acknowledge that it is as safe as any other part of the river. The dam and chute were completed in the month of December last.

Whilst speaking of chutes, it may not be irrelevant to state that from observations made, the conclusion has been formed that the following requisites are essential in the construction of a permanently safe chute, where the dam is of considerable height, viz:

First. That the bottom of the river at the tail of the chute consists of a solid rock, or artificial foundation, which cannot be disturbed by the action of the water; and that this bottom extend for a distance of from two hundred to five hundred feet below the termination of the chute, in proportion to the height of the dam.

Secondly. That the chute have a sufficient length in proportion to the height of the dam—the length of the chute increasing in a geometrical ratio with the direct increased height of the dam.

Thirdly. That no greater depth of water be admitted at the head than is barely sufficient to carry the craft through at the lowest flood, suitable for craft to run in the river.

Those appear to be the chief and leading objects to be attended to in those erections, and are stated as the result of much reflection on the subject, in the hope that they may afford some small degree of aid in the construction of such works.

During the winter, ice had formed on the pool of the feeder dam, of about ten inches in thickness, and on the river generally, of sufficient thickness to admit of the crossing of wagons upon it. In the month of January this ice went off with a freshet, which rose generally ten to eleven feet above low water mark. No damage was done by this freshet to any part of the work, except that of taking off about one hundred and twenty feet of the breast plank of the feeder dam. This part of the breast has since been renewed, together with the lower range timbers, which parted and went off with the breast plank, and the whole has been more thoroughly secured by means of strong iron bridges, and by bolting the whole of the breast plank to the range timbers, with iron bolts one inch square. The quantity of iron alone for addition and repair, amounts to fourteen thousand three hundred and fourteen pounds. The breast plank consists of a double course of five inches thick, oak and hemlock. The troughing below the dam has not progressed so far as to render any additional crib work necessary for its security as yet. It seems probable, however, that a course of crib work on the plan recommended in my report of last year will be required at a future day.

The waters of the river having fallen during the latter part of the summer to a very low stage, proved the necessity of an additional course of travelling, to keep up the water to a sufficient height in the pool of the feeder dam, to afford a supply for the canal and for the preservation of the timber work of the dam. The waters, in the month of August, had fallen to the depth of two feet below bottom of canal in the pool of the dam, or seven feet three inches below the comb of the dam. The work of travelling having been thrown open to all who might deliver gravel at the price fixed, and measured in the flats, a sufficient number were at once engaged, and the work was speedily completed, so as to raise the water fairly over the comb at the same time affording a supply for the canal, without any material aid from the Bald Eagle. A small expenditure may be required yearly for some time in tightening the dam.—By judicious management it may be kept full at all times, more especially if the supply which may be obtained from the Bald Eagle is resorted to. The quantity of gravel put into the dam this season, is twelve thousand four hundred and ninety-six yards.—Before the graveling was commenced, the stone filling of the dam for the depth of about fifteen inches, was broken after the fashion of turnpike work, so as to render it as com-

pact as possible, and in order that it might hold the gravel filling placed on the top of it.

Considerable repairs have also been made to the chute during the past season, rendered necessary by the effects of the spring freshets. A quantity of stone filling was put in to secure the foundations of the side walls, and in order to level and smoothen the bottom. The head of the chute was paved, and a frame constructed for the purpose of shutting the water out of the chute at a dry time. The shore wall of the chute was extended three hundred and thirty feet at the tail, and carried up to a height corresponding with the adjoining wall.

The whole of those additions and repairs at the dam and chute, amount to the sum of nine thousand eight hundred and eleven dollars and fifty-one and a half cents.

The tabular statements accompanying this report are intended to show, as far as practicable within the limits of the tables—Firstly, the amount of each item of work, excavation, embankment, &c. on each job, together with the actual cost of each. Secondly, the actual total cost of the work done under each general head, sections, aqueducts, &c., and lastly, the total cost of the whole work on the upper division of the Lycoming line, including the feeder and Bald Eagle side cuts.

The total cost of the whole work, as will appear from the general abstract statement, amounts to

\$811,332 97½

By referring to the report of last year, it will appear that the gross amount of the estimate for completion, was

\$869,168 74½

From this deduct the estimated cost of a towing path bridge at the feeder dam, an outlet lock at Reed's run, and a guard lock at the Blue Rock, submitted for the decision of the board and deducted,

38,000 00

831,168 74½

Surplus applicable to the payment of engineering and office expenses,

\$19,835 77½

The total cost of the upper division of the Lycoming line, including the feeder, as per my present report, is

\$764,056 19½

Work done not included in the estimate of the last year, viz:

Guard gate at Blue Rock,	\$4,527 05
Bridge at Muncy town, (Hanna's),	495 35
Culverts at Muncy town, (Hanna's),	449 61
Repairs and additions to dam and chute,	9,811 51½
Do. sections 47, 48, 49, Hip Rap, &c. to protect against the river,	1,739 02

17,022 54½

Total cost of work estimated last year on the upper division of the Lycoming line and feeder,

\$747,033 65½

The total cost of Bald Eagle side cut, as per my present report, is

47,276 77½

Work done not included in estimate of last year, viz:

Lock house at Bald Eagle guard lock,

\$511 98

Shore wall below chute, (Bald Eagle dam,) 837 85	
Waste wier on section No. 2, 387 7½	
	1,737 5½
Total cost of work estimated last year on Bald Eagle side cut, 45,539 23	
Amount upper division, &c. brought over, 747,033 65½	
Amount, 792,572 88½	
869,168 74½	
38,090 00	
Total estimates of same work, 831,168 74½	
Surplus, \$38,595 86½	

The work embraced in the tabular statements shewing the cost of the line, does not include the sum necessary for the protection of sec. No. 31, and lock sec. No. 4, from the encroachments of the river. The canal at this place is located so as to leave a strip of land between the canal and the river, sufficient for the protection of the canal at the present time. Under this belief, and the knowledge that this part of the line could be protected more cheaply after the admission of the water than during the construction of the other work of the sections, this part of the river bank about thirty-five chains was left in its original shape. Since letting in the water, the soakage from the canal has caused the bank to slip between the towing path and the river, and its immediate protection is advisable. The protection should consist of a rip rap wall, the stone for which can be procured at the rock sections two and one-half miles higher up the river, close to the bank of the canal. The estimate for the completion of this protection in a permanent manner, is as follows:

Excavation, slope, 5,000 10	\$500 00
Rip rap, 12,000 40	4,800 00
	\$5,300 00

A similar protection on section No. 9, would also in my opinion be a judicious work. At this place there is barely room for the main road between the canal and the river. The soakage from the canal has converted the road into a quagmire, and both the preservation of the road, and the complete protection of the canal seem to require that the bank should be secured with a rip rap, or other wall. The estimate for this is as follows:

Excavation, slope, 1,000 10	100 00
Rip rap, 2,000 50	1,000 00
	\$1,100 00

About twelve hundred rods of fence yet remain to be made in order to place the land holders throughout the line on the same footing in this particular. They have themselves held the contracts for making the fence, but as it was not made, it was not included in the statements shewing the cost of the work. This fence if made will amount at one dollar per rod to twelve hundred dollars.

Very respectfully your obedient servant,

JAMES D. HARRIS,

Engineer, upper division, Lycoming line.

#### REPORT OF R. FARIES, ENGINEER.

To WILLIAM F. PACKER, Esq.

Sup't of the West Branch Canal.

Sir:—To enable you to report the transactions upon your line, to the Board of Canal Commissioners, for the year ending the 31st October, 1834—the following information is respectfully furnished.—It comprises all that is required from the engineer department, in re-

lation to the old line and the lower division of the Lycoming.

The lower division of the Lycoming line commences at a point thirty-two perches west of the Lycoming creek and terminates in the pool of the Muncy dam, two miles and two perches below the out let locks. Fifty miles and one hundred and fifty-two perches of it is a canal, the residue is a towing path formed along the pool. From the point of intersection with the "upper division," to Lock No. 5, the distance is seventy-seven perches. The ground passed over, presented serious difficulties; embankments had to be raised varying in height from five to twenty-three feet, and an aqueduct built four hundred and twenty-two feet in length, including the wing wall; the abutments and piers of the aqueduct are faced with lime stone neatly dressed and laid in regular courses; the superstructure is straight stringers with balance beams and under braces; there are seven spaces for the water of the creek to pass through, forty-two feet in the clear, each.

The level commencing at lock No. 5, passes through the town of Williamsport, and terminates at Lock No. 6, on the west bank of Loyalsock creek. It is five miles and one hundred and thirteen perches in length; five small streams are crossed with stone culverts, the aggregate of their spans is thirty-six feet. A cast iron pipe passes under the canal to drain a part of the town, its calibre is sixteen inches; nine farm and five public bridges have been built over this level.

The Loyalsock is taken in as a feeder. Heavy embankments are carried over the low ground in the vicinity of the creek, and two dams built; one across the main channel, four hundred feet in length, the other across a branch one hundred and four feet. At the branch a towing path bridge is built upon bents, the superstructure is one hundred and fifty feet in length. The "Mitchell bridge," crosses the main channel, the abutments and piers are limestone, dressed, and laid in courses; the space between the abutments is three hundred and four feet in the clear, which is subdivided into three spans, two of eighty feet and one (the centre span) of one hundred and twenty feet chord. The plan of the superstructure is a combination of the permanent bridge at Philadelphia, and of Pope's lever bridge; the floor rises in its whole length four feet six inches, it is effectually caulked and well pitched, so as to protect the under work from the weather, the smaller spans have versed sines of six feet, the larger has a versed sine of nine feet.

Taking the superstructure in connection with the wing wall, the whole length of the bridge will be four hundred and thirty-four feet. From the creek to lock No. 7, ordinary ground is passed over, the distance between lock No. 6, and lock No. 7, one hundred and eighty-six perches, it has but one public bridge.

Lock No. 7, answers the purpose both of a guard and lift lock, continuing on, the canal passes over favorable ground until it approaches the east line of John Andrew Shulze's farm, at which place a heavy embankment is raised across a channel of the river, from whence the towing path is carried along on "Spring island," until it arrives within a few rods of lock No. 8, where the first land is again resumed, upon this level four bridges occur, two with abutments alone, one with abutments and one pier, and one with abutments and two piers, length of level two miles one hundred and twenty eight perches.

Pursuing the bottom land, the ground was remarkably favorable for a canal; but one six foot culvert occurs until "Armour's run" is reached, where another of similar chord is built. After crossing the run, embankments had to be raised for nearly a thousand feet, from eight to twenty-three feet high; and within a few hundred feet, again, embankments had to be raised twenty-three feet in height, and nearly four hundred feet in length, and a culvert of twelve feet chord built over "Carpenter's run;" the canal then continues along a

side hill, and through deep cutting until it reaches Lock No. 9—this level has also a culvert under it of six feet chord, to convey water to the mill of Robert C. Hall, and one public and six farm bridges crosses it.—It is three miles and three hundred and eight perches in length. A basin twelve rods long is formed between locks No. 9 and 10.

Immediately after leaving Lock No. 10, "Hall's Bluffs" set in, and are passed by a wall and embankment fifteen hundred and one feet in length, and twenty-two feet high above the water of the river.

At the lower end of the "Bluffs," the Muncy falls commence, where every facility for a cheap canal was afforded until the creek had to be crossed; here difficulties beyond what was at first anticipated, had to be encountered. On the west side of the creek the rock made its appearance, and it was confidently believed that it could be got at to found the abutments and piers for an aqueduct the whole distance across; this idea, however, proved fallacious, for after several unsuccessful attempts to get to the rock on the east side, that abutment and the pier next it had to be founded upon cribs; they are well secured with heavy rip-rap, and a crib sunk immediately below filled with heavy stone.

The distance between the face of the abutments is one hundred and ninety feet sub-divided into four spans of forty feet, each, in the clear; the remaining part of the space is occupied by the piers. Notwithstanding the unforeseen difficulties the water was passed within a few days of the time contemplated in my last year's report.

The flat below Muncy creek is considerably depressed below the level of the canal, it is crossed by heavy embankments, and a twelve feet culvert at "Glade run," upon which immediate relief is had, and the ground continues favorable until the canal arrives at Lock No. 11. Length of level two miles, two hundred and twenty-four perches, upon which there are three public and two farm bridges, there is also a four feet culvert under this level that drains a piece of low ground lying behind the borough of Muncy.

Between Lock No. 11 and No. 12, (the out lets) a large basin is formed sixty-four rods long, with an aggregate width of eighty feet. Boats may safely moore in this basin at such times as the river may be too high to venture into the pool of the dam.

The remainder of the distance of the lower division, two miles and two perches is towing path, formed partly along a slate bluff, and partly on the alluvial bank.

The tables show the amount of work done upon each section, and upon each item of incidental work, together with the names of the contractors.

The aggregate of the cost is as follows, viz:

For Sections,	\$147,182 03½
Dams,	14,684 12
Aqueducts,	30,328 66
Locks,	38,115 51
Public and farm bridges,	19,056 28
Towing path bridges,	16,063 72
Culverts,	10,432 61
Waste wiers,	1,951 36½
Lock Houses,	3,074 71
Miscellaneous work,	24,214 65½
Fence,	8,955 37
	<hr/>
Amount required to complete, for fence, etc.,	500 00
	<hr/>
Total cost,	\$314,559 03

The lockage in the whole distance is fifty-six feet, divided into nine lifts, viz: Lock No. 5, has a lift of four feet, No. 6, seven feet, No. 7, five feet, No. 8, six feet, No. 9, six feet, No. 10, six feet, No. 11, six feet, and No. 12, two eight feet lifts combined.

On the fourth of July, the first boat navigated the canal as high up as the Loyalslock, since which time that portion of the canal has been in good order, with the exception of a short period when the water in the creek was too low to feed, and it is gratifying to have it in my power to say, that no breach has occurred.

The remainder of the lower division will be fit for use in a few days; the water from above has already passed this place.

When I submitted my report of 1833, the Lew- isburg cross cut was so near being completed, that the water had been introduced. It has also been fortunate, in not having any breaches.

The whole cost is as follows:

Cost of work done by William Cameron, on canal, locks and dam, &c.,	29,739 75
Cost of work done by James Lee, on towing path bridge and embankment,	1,787 84
Cost of fence made by Abbut Green,	382 00
Cost of removing buildings by Rebecca Steadman,	200 00
	<hr/>
Total cost,	\$32,029 59

Upon the line, the only work put under contract, except such as was done by the supervisor during the past season, was the weigh lock at Northumberland. The amount estimated for work done, is 3,100 00 The amount required to complete, including buildings,

Total cost,	\$12,600 00
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The estimate made last year, was for a lock of wood and stone combined, the lock now being built is of cut stone, one foot of the bed and joints of the ashler, is laid in "Roman cement;" the residue of the walls is grouted with a cement manufactured from a substance taken from "Laries bluffs," on the West Branch. The superiority of the work, when completed, will fully justify the increased expense.

By a resolution of the Board of Canal Commissioners, in compliance with an act of the legislature of last session, George Eckert of Milton, in the county of Northumberland, was permitted to take water from the canal for milling purposes, for which he is to pay the sum of one hundred and twenty-five dollars per annum, for four inches of water, four feet in width, drawn from the surface.

On the 20th of September last, the water was first introduced into his mill race; since which time, the mill has been supplied from the canal, with the quantity of water heretofore specified.

ROBERT FARIES, Engineer,  
Northumberland and Lower division,  
of the Lycoming line.

WILLIAMSPORT, October 29, 1834.

#### TO THE CITIZENS OF PHILADELPHIA

The undersigned were appointed, under a resolution of a General Town Meeting, held on the 3d inst., to prepare a Remonstrance to the City Councils against a project submitted to them, for removing the Market House from High street.

The project referred to did not originate in any petition to Councils. It was a mere suggestion, embraced in a Report of certain Commissioners, who were appointed by Councils to consider the best mode of conveying goods to and from the Broad street Rail Road to the wharves.

This Report has been before Councils for about a month, and no attempt has been made to carry the proposed change into execution. So far as public opinion has been expressed, it is known to be hostile to the removal of the Market Houses. The undersigned cannot suppose that Councils will be so unwise as to re-

linquish, without any equivalent, an annual income equal to that of a capital of three hundred thousand dollars, and then incur an expenditure probably of a million of dollars. In short, the project so far is abortive; and it is presumed, that a remonstrance was to be presented only in the event of any serious effort to carry the project into execution.

Until some such effort shall be made, therefore, the undersigned deem it inexpedient to exercise the power conferred on them, of calling another Town Meeting, or of submitting a remonstrance to Councils.

Paul Beck, Jr.	James Paul,
W. J. Duane,	Joseph S. Riley,
George Emerick,	Bernard B. Hazelton,
Edward Macpherson,	Thomas Fletcher,
Morgan Carr,	William H. Davis,

ROBINSON R. MOORE,  
Secretary.

JUNE 17, 1835.

### RAIL WAYS—WATER POWER.

The Richmond Compiler publishes a description of a novel mode of applying the water power of rivers, suggested by Mr. Heron, Civil Engineer, at Richmond. If the application be practicable in the mode and to the extent described by Mr. Heron,—and we have no reason to doubt that it is,—the discovery is of no ordinary importance.

The principle is this:—to apply the water power accumulated at the locks of a Canal to a "breast wheel" or "pitchback," whereby four-fifths of the power will be available to set any machinery in motion. Let it, says Mr. Heron, be applied to an endless chain or rope, passing over suitable rollers along the line of a Rail way, after the manner of the stationary system of steam engines, we shall have a water power Rail way entirely free from the objections that can fairly be urged to the stationary steam engines, of the necessity of keeping up the fire and steam, &c.

Mr. Heron first enters into a calculation to show the force of the moving power, and comes to the result that between Covington and Richmond, a distance of two hundred and fifty miles, the water power of the James river would be adequate to the transit and delivery of three thousand eight hundred tons hourly.

He next makes an estimate of the cost of the application, substituting a granite tram way for the iron rail way, which is as follows for a power capable on the James river of delivering one hundred tons per hour.

Motive power, or proportionate cost of dams per mile,	\$3,250
Ropes, a double line per mile,	1,800
Rope rollers, put up,	850
Broad granite or marble tram way, double track,	8,000
Grading and bridging per mile,	2,000
	15,900
Add ten per cent. for superintendence,	1,590
	\$17,490

Mr. Heron invites men of science to investigate his proposed plan.

### THE CROPS IN NORTHUMBERLAND.

The *Miltonian* of the 13th inst. says:—"The cut worm has been very destructive in this section of the country—entire fields of corn have been destroyed by this *mulish* insect: what is left looks promising—and Thursday night's rain has given new vigour to the prospects of the husbandman. There is a hope that the crops this season will not make more than half a failure."

### OBSERVATIONS ON THE LIVERPOOL AND MANCHESTER RAIL WAY.

By Mr. David Stevenson, Edinburgh—read before the Society of Arts for Scotland, 25th February, 1835.

The improvement of Rail way communication is now a subject of so much importance, that any observations relative to the construction of rail ways, or the best mode of conducting traffic on them, especially such as are elicited in the course of practical trials, will generally meet with some share of public attention. I, therefore, venture to address to this Society a few observations upon the Liverpool and Manchester Rail way, the most remarkable work of the kind hitherto executed, both as regards the rail way itself, and the means of traffic employed on it. These observations occurred to me during a late professional engagement on that work under Mr. Mackenzie of Liverpool; and though I do not think it necessary to give a lengthened account of the rail way, I trust that some of the facts which I have collected will be found sufficiently interesting to excuse me for having brought them under the notice of the Society.

The Liverpool and Manchester Rail way was opened on the 15th of September, 1830. Its formation and construction, including the erection of lodges, depots, and offices, is said to have cost about one million sterling, or at the rate of \$3,300*l.* per mile; but as much of the work was not done by contract, this rail way cannot be taken as a criterion of the expense of operations of this nature, which now are executed at a much lower rate.

The whole length of the main line is thirty miles.—It forms a double way composed of four single tracks of rails, having several branches to towns and collieries on either side. These branches, in most instances, consist of only a single way, with passing places. Connected with the main line, there are many works of importance and interest, including three tunnels, sixty-three bridges, and several cuttings and embankments of great extent. The drainage of Chatt Moss, and the conveyance of the Rail way over that bleak and uncultivated tract of country, are also particularly worthy of notice; but as accounts of these works have already been made public, I shall not farther notice them.

Except at Whiston and Sutton Inclined planes, where the inclination is at the rate of one foot perpendicular to ninety-six horizontal, there is no part of the Liverpool and Manchester Rail way, more than one in 880; and the curves in no instance deviate from the straight line more than four inches in the chain, or 66 feet.—The inclination of one in 880 is hardly felt by the locomotive engines, and the curves are so gentle as to affect their progress very little. But the inclines of one in 96 on the main line, and several of the curves on the branch lines, prove formidable impediments, by diminishing the speed of the engines, and occasionally causing them to stop. The distance between the rails forming the tracks is 4 feet 8½ inches, and the distance between the two rail roads or ways is the same. The rails are of that form technically called *fish-bellied edge rails*; they are made of malleable iron, in lengths of 15 feet, and weigh at the rate of 33*lb.* to the yard. They measure 2 inches in breadth at the top, 2½ inches in depth at the chair, and 3½ inches in the middle.

It is worthy of remark, that, when these rails break, the fracture is generally a few inches from the part resting in the chair, and never in the thick part of the rail, between the points of support, which has led to the adoption of a parallel rail in all cases of repair. This rail weighs at the rate of 40*lb.* to the lineal yard. At every three feet the rails rest in a cast iron chair, which, including keys and spikes, weighs about 16*lb.* The chairs rest upon stone blocks in the cuttings where the ground is solid, and upon wooden *sleepers* on the embankments. The resting blocks contain 4 cubic feet of stone; two holes, 6 inches in depth and 1½ inch in diam-

eter, are drilled in them, and into these, oak treenails are driven, to which the chairs are spiked. The sleepers are of oak or larch, and contain about  $1\frac{1}{2}$  cubic foot of timber; they measure from 9 to 10 feet in length, and being laid across the road, each sleeper gives support to both rails. When sleepers are used, a seat is cut in them for the chair, which is simply spiked down to them. A piece of cloth or felt dipped in pitch is generally interposed between the chair and the stone blocks to make the seat more solid. The blocks occasionally split when the treenails are not driven home with care, but the sleepers are most frequently in want of repair and renewal.

The repair and keeping of the way was this year (1834) let by contract for 6000*l.* being at the rate of 200*l.* per mile. The contractor furnishes labor, chairs, keys, and spikes, while the Rail way Company furnish rails, blocks, and sleepers. They calculate upon having to renew one chair per mile per day, and 120*l.* per annum is taken as the outlay for keys and spikes. The workmen employed in repairing the rails, and keeping the road in order, are called *plate layers*, and the tear and wear is so great, that there is constant employment found for three men on every mile of the rail way. The *ballastings*, in which the blocks and sleepers are embedded, consist of sand and broken stone, and form a stratum of two feet in thickness.

The Rail way Company have had thirty-two locomotive carriages made, five or six of which are now out of use, and many of those at present on the road have been almost totally renewed. These carriages are all numbered and named. No. 1 is called the "Rocket." This engine was made by Messrs. Stephenson the engineers, and is that which did them so much honor in carrying off the prize of 500*l.* given by the Directors of the Liverpool and Manchester Rail way for the best locomotive carriage. It has been little used, and is still in good repair.

The locomotive carriages used at present on the rail way are of three kinds, and are called *train*, *luggage*, and *bank* engines. The train engines average about thirty horses' power. They weigh about eight tons, and cost about 900*l.* The luggage engines are in general thirty-five horses' power, and weigh about nine tons. They cost about 1000*l.* There are only two bank engines, the "Goliath," and the "Samson," which are used for assisting the trains with passengers and luggage upon the inclined planes at Whiston and Sutton. They are about fifty horses' power, weigh about twelve tons, and cost about 1100*l.* The cylinders of these different engines measure from eleven to fourteen inches in diameter, and the length of strokes varies from sixteen to twenty inches. The carriages used for conveying water and fuel for the engine are called *tenders*; they have four wheels, and are yoked behind the engines.—They average when loaded about four tons weight, and cost about 150*l.* each.

The principle on which the boilers are constructed, is simple, and at the same time very efficient. For this invention, it is believed the Rail way Company are indebted to their treasurer, Mr. Booth. The shell or outside coating of these boilers consists of sheet iron, half an inch in thickness. Brass tubes, one-eighth of an inch in thickness, and from one to three inches in diameter, are rivetted or fixed into the end plates of the boiler, and being open at both extremities, allow the fire to pass freely through them. By this means a great surface of the water contained in the boiler and surrounding the tubes is exposed to the heat, and the steam is more quickly generated than in the common boilers.—A steel ring, about one-eighth of an inch in thickness, one inch in breadth, and slightly tapered, is driven into the brass tube, after it is fitted into the boiler plate, by which means the tube is wedged against the plate, and thereby rendered water and steam tight. The tubes are proved by means of a water pressure of 50 lbs. on the square inch, and notwithstanding this, they fre-

quently burst. When this accident happens, the engineer stops both ends of the broken tube with wooden plugs. The mechanics connected with the rail way prefer the large tubes of three inches bore to the small ones, which are more apt to get choked with soot and ashes. The boilers are generally seven feet long, and four feet in diameter, and contain about seventy or eighty of the small sized tubes. Round the boiler there is a *lugging* or casing of one half inch deal timber, fixed with iron hoops, which being a non-conductor, prevents the radiation of heat, and greatly facilitates the generation of steam, especially in frost, or in a damp state of the atmosphere. The time required for getting up the steam, even in the most improved boilers, is generally above an hour, when every thing is in a cold state.\* The Act of Parliament, in consequence of the smoke raised by pit *coal*, enforces the exclusive use of *coke*, which increases the expense of fuel about 40 per cent.

The cylinders are horizontal in all the locomotive carriages, with the exception of two, in which they are vertical, and these are not found to answer so well, and require more repair; the cause of which may be satisfactorily explained in the following manner:—When the cylinders are vertical, the machinery cannot yield to the up and down motion of the piston rod, and has consequently to bear the whole shock; while, on the other hand, when the cylinders are placed horizontally, the motion of the piston tends to impel the carriage along the rails, by which the shock is deadened, and has not so injurious an effect upon the machinery. The objection to horizontal cylinders, founded upon the more rapid abrasion of the lower side of the piston by the effect of gravity, is not found to have much force in practice. In some carriages the piston rods are connected to the outside of the two fore-wheels, but in the improved engines they are connected to cranks on the axle of the carriage, in which case the cylinders are placed below the boiler, and are quite hid from view. On these engines also the wheels themselves are connected by rods, by which means the moving power is applied to four wheels instead of two, which doubles the adhesion of the carriage to the rails. The *cross-head* at the end of the piston rod, working in a slide produces the parallel motion. I may add, that some experiments were made on the Liverpool and Manchester Rail way, with Lord Dundonald's rotatory engine, which were of so favourable a nature, as to induce the Rail way Company to construct a locomotive carriage on that principle. I have not, however heard whether their efforts to introduce the rotatory system have proved successful.

The *fire-box*, consists of a double casting of metal, with an intervening space of about 4 inches. This space is filled with water, and has a free communication with the boiler, of which it may be said to form a part. It has a grated or ribbed bottom for holding the fuel, about nine square feet in surface. The *smoke-box* and the *funnel* are made of iron, and are indispensable for catching the dust and embers blown through the tubes, carrying off the smoke and steam, and causing a draught for the combustion of the fuel. In the improved engines, the waste steam is ingeniously blown into the tender, and heats the water for the supply of the boiler.

The framing in some instances is made of cast iron, but more generally of wood. It rest upon the axles, and supports all the machinery, together with the boiler and its accompaniments. Connected with it also are springs for rendering the motion as smooth as possible

\* A member of the Society having mentioned, that on the Glasgow and Garnkirk Rail way, the steam is raised in 20 minutes, I think it necessary to remark, that the time stated in the text is dated from the first application of heat to the fuel, and is the result of many observations made by me while at Liverpool.



for the machinery. The carriages have generally four wheels; the "Atlas," however, and some others have six. In some carriages all the wheels are of the same size, and about five feet in diameter, while others have one smaller pair of wheels about four feet in diameter. The naves and rims are of cast iron, and the spokes and tires of malleable iron. Sometimes, however, the greater part of the wheels, like the framing, is made of wood.

It was lately suggested, as an improvement on locomotive carriages, to work the engines more slowly, and to produce the same or a greater speed by increasing the size of the wheels. Wheels of six feet in diameter were accordingly applied to one of the engines, but were found to produce an unsteady motion, and so greatly to increase the liability of the carriage to start off the rails or break down, that they were immediately discontinued. The rail way Company at present allow no wheels more than five feet in diameter to be used on the line. The greatest speed which the engines have been able to attain on a level, is sixty miles per hour, without a load. The Planet engine with her tender went from Liverpool to Manchester in forty-five minutes! being at the astonishing rate of forty miles per hour, including time lost in stoppages and ascending the inclined plane.

During the wet weather the engine wheels are found to adhere better to the rails than in dry weather, but if the rails are only damp or greasy, the wheels have a tendency to slide instead of rolling, and the carriages then have considerable difficulty in dragging along their loads. According to Mr. Booth's experiments, the adhesion of the wheels, in the most unfavorable state of the rails, is equal to one-twentieth of the weight supported by them. During frost, a loaded wagon is generally placed before the engine to rub off any ice or hoarfrost that may adhere to the rails. After the steam is thrown off, and the *break* or *drag* applied, in order to stop the trains, the time that elapses before they cease to move, is generally from 40 to 60 seconds, but this depends entirely on the state of the rails, and the rate at which the carriages are moving.

There are generally eight or ten engines at work on the line, each of which makes four trips a-day between Liverpool and Manchester, and on coming in at night the steam is blown off, and the machinery is thoroughly cleaned. At each end of the line the company have a depot, consisting of sheds, where the engines are repaired at the sight of an overseer or manager, and it is not a little remarkable that 200 men are employed in keeping these engines in good order. The carriages are daily in want of some small repair, but they generally run about eighteen months before receiving a renewal, or thorough repair. The "Vulcan," a train engine, ran no less than 47,000 miles before it required to be taken into the shed for repairs, and the "Fire-fly" ran 50,000 miles. I have never seen any correct account of the work done by the several engines, or the repairs made on them. According, however, to the rail way Company's reports, the expenditure connected with the locomotive power, exclusively of outlay for new engines, amounts to the extraordinary sum of about 28,000*l.* per annum. On visiting the Stockton and Darlington rail way in the month of November last, I learned, through the kindness of Messrs Pease, the promoters of this undertaking, that the engines running on that rail way very seldom required repair, although in their construction, and the workmanship employed on them, they fall greatly short of those in use on the Liverpool and Manchester line. But at Darlington the rate of travelling is only eight miles per hour, while at Liverpool twenty-five miles per hour is the usual speed; and hence we are fully warranted in supposing that the great wear and tear on the Liverpool and Manchester rail way may be chiefly attributed to the speed at which the engines are worked. Notwithstanding the smooth surface on which the carriages run, and the judicious

use and application of springs, the tremor or shaking of the engines is very considerable, and is much increased with speed. When moving at the rate of twenty-five or thirty miles per hour, the tremulous motion of the engine becomes quite alarming to those unaccustomed to it.

The luggage engines perform a great deal of work, and generally bring in twenty loaded wagons, averaging 3½ tons each. With this load they move easily at the rate of twenty miles per hour on every part of the rail way, excepting at Whiston and Sutton inclined planes, where the effect of gravity reduces their power two thirds, and forces them to bring their load to the summit at two, and sometimes three trips, although assisted by the bank engines. They nevertheless make the journey, between Liverpool and Manchester in about two hours. Upon one occasion I saw the "Fury" engine with twelve loaded wagons, averaging 3½ tons each, ascend the Whiston inclined plane with the aid of the bank engine; its speed on the level was about thirty miles per hour, and when it reached the top of the incline, the velocity was diminished to about two or two and a half miles per hour. This inclined plane is a mile and a half in length, and its rise is at the rate of one in 96.

Some idea may be formed of the load these engines are capable of taking, and of the rate of charges and expenses of fuel, from the fact, that, during my stay in Liverpool, the "Atlas" engine brought in forty-seven wagons, being a load of 160 tons, for which the company's charge would be 70*l.* sterling, or at the rate of 1*l.* 10*s.* per wagon. It is, I believe, calculated that the combustion of half a pound of coke will produce steam sufficient to carry one ton one mile, at the rate of travelling adopted on this rail way, so that the conveyance of one ton from Liverpool to Manchester require about 15 lb. of coke, the cost of which is about 2*d.* The expense, therefore, of fuel for bringing 160 tons from Manchester to Liverpool, according to this calculation, may be taken at 1*l.* 10*s.* while the company's charge for carriages is 70*l.*; so that the chief expenditure, after the interest of the first cost of the rail way, is in keeping the engines and rail way in pair.

The second class train makes the journey in two hours, and has generally eight or ten carriages, which are open, and each seated for twenty-four persons.—There are nineteen stations on the line where this train regularly stops, for the accommodation of passengers; and at each station there is a watchman, who makes signals if he sees cause for stopping the train. The signals are made during the day by red flags, and by lights after sunset.

The first class train makes only one stoppage, at Newton, to take in fuel and water, and performs the journey of thirty miles in an hour and a half. The coaches in this train are framed and covered like handsome road carriages, and are seated for eighteen passengers, with the exception of the rail way mail coach, which goes at the end of the first class train, and is seated for twelve persons. The charge for passengers from Liverpool to Manchester by the first class train in the mail is 6*s.* 6*d.*, and in the other carriages 5*s.* 6*d.* In the second class train, the fare, by the close carriages, is 5*s.* 6*d.*, and by the open ones 4*s.* The weight of luggage allowed to each passenger is 60 lb. beyond which a charge is made at the rate of 3*s.* per cwt. The charge for conveying a four wheeled road carriage is 2*s.*, and a two wheeled carriage 1*s.* One horse is charged 10*s.*, two horses 18*s.*, and three horses 22*s.* About one thousand and twenty passengers, and six hundred and forty tons of goods are daily transported along the rail way.

Each engine carries two men, an engineer and a fireman, who have respectively 5*s.* and 2*s.* 6*d.* a day. As a check upon their regularity, a fine of 2*s.* 6*d.* is imposed on the engineer for every fifteen minutes he arrives before his time. There is a *breaksman* with the luggage train, and the trains for passengers carry two guards.

The occurrence of accident is not so frequent as might be imagined, as the great weight of the carriages prevents them from easily starting off the rails; and so great is the momentum acquired by these heavy loads moving with such rapidity, that they easily pass over considerable obstacles. Even in those melancholy accidents where loss of life has been sustained, the bodies of the unfortunate sufferers, though run over by the wheels, have caused little irregularity in the motion, and the passengers in the carriages have not been sensible that any impediment has been encountered on the road. For the prevention of accident, some arrangements have been adopted, by which the north rails are exclusively allotted for engines going towards Manchester, the south being for those going towards Liverpool.

The rail way business is conducted by twelve directors, who give a half-yearly report on the income and expenditure; and a dividend of nine per cent. per annum has been declared for payment. At present, the rail way is in use only during the day; but by conveying goods during the night, provision may be made for a great increase of traffic, without incurring expense in the execution of new works.

Edinburgh, 21st Feb. 1835.

From the Philadelphia Gazette and Intelligencer.

#### JAUNT FROM PITTSBURGH TO PHILADELPHIA.

Mr. Editor:—Having recently made a trip from Pittsburgh to this city, along the whole line of our great improvement, and having experienced great pleasure and astonishment at what I saw, and what we Pennsylvanians possess, I have been induced to give you a hasty sketch of what a traveller may expect who journeys that way, and for no other object than to *promote the intercourse between Philadelphia and Pittsburgh*. Having travelled over every route that the mountains can be crossed, and feeling a desire to examine our public works; I left Pittsburgh on Monday night at 10, in the Pioneer Packet line, expecting little comfort, rough fare and tedious travelling; how far I was disappointed in my expectations, you shall be informed. You enter an omnibus at your lodgings, and are conveyed to the canal basin, at the termination of the costly aqueduct, that carries the waters of the canal over the La Belle Allegheny into the city. I there found the beautiful Packet Boat Pittsburgh, well filled with passengers, almost ready to start. A few minutes examination of her capacity and qualities, dispelled many doubts that had existed in my mind, as to my own personal comfort. The bugle sounded, crack went the whip over three most beautiful horses, and a few minutes sufficed to place us on the other side of the river. The moon was up, and as we journeyed along the canal, we had a fine view of the city, and the numerous towns and villages that surround it. Thirty miles from Pittsburgh, after passing the town of Freeport, crossed the Allegheny again over an aqueduct, as the sun was rising, which enabled those who are fond of "stirring with the lark," to observe the beauties of both nature and art, at one view elegantly combined. The boat now entered the Kissiminatass—our speed was much accelerated in the slack water. The craft not meeting with the same resistance within the confined dimensions of the canal—on she moved, passing rapidly by scenery that would delight for hours. As you further progress on this beautiful pool, you commence entering what is called the salt region, and as you gaze on either bank, a dingy salt manufactory presents itself. I think I am safe in saying an hundred. This article, that gives zest to the food of millions, is sent from here in great quantities to the general mart at Pittsburgh. Innumerable coal pits are opened along the shore, to supply the works, with fuel as they are all conducted on the "boiling system."

Before reaching Warren, 42 miles from Pittsburgh,

your sight is attracted by the appearance of enormous rocks laid bare; they appear as if the earth had abandoned them for countless ages. Numerous little mountain streams may be seen running and leaping from rock to rock, and then not flowing into the river quietly, to pay tribute, but dashing as a bold invader, as if to give battle. Numerous boats now passed on their way, laden with every description of goods for the far west.

On the tops of many were seen the rich ore of the Juniata in blooms, destined to pass through the rolling mills of the Birmingham of America. The tunnel, six miles from Saltsburgh, a cut of 840 feet through, is an admirable piece of work. You glide through this subterranean avenue, and have scarcely time to imagine yourself in the bowels of the earth, ere you again behold the blessed sun.

Blairsville, 73 miles from Pittsburgh, is a beautiful town, having been mainly built within a few years. It exhibits a modern and cheerful appearance. From the town, you pass on through as picturesque scenery as the most fastidious lover of the sublime and beautiful could require. The bugleman, in attempting to enliven the scene, murdered most horribly some airs of Rossini. I thought at the time, that if the aborigines were again on the banks of the river which they must have loved, that we might pass on without fear of molestation, as such terrific discord would alone have put them to flight. He acquitted himself, however, very creditably, when he curbed his blasts down to 'Zip Coon,' 'Jim Crow,' and that universal tune, 'Buonaparte crossing the Rhine.'

Being in a cheerful mood, I determined to be pleased with the arrangements of the line, and commenced propounding to myself a few questions. One very important one was, whether this route would not, ere long, become a fashionable tour for the spring and summer months? I made up my mind at once to the fact, and predicted, on the spot, that three short years would not elapse, ere Philadelphians would be as plenty on these romantic streams, as the stately sycamores are on their banks. The works are of greater magnitude than those of New York state; the expenditure for their completion has been almost double—the scenery is never monotonous, as you must find it on the New York Canals, but is always grand, and beautifully diversified. Niagara is the feature of their trip—the scenery, the works of art, and the views of the Allegheny, the Monongahela and the Ohio ours. But to make this trip, you will ask what can you expect within the confined limits of 12 feet by 80? Some will exclaim, not much.—I say, entertain your opinion, for the agreeable nature of your disappointment will be immense.—Let me enumerate the conveniences of this little floating hotel. First, you have a promenade deck the entire length of the boat, on which you may sit, walk, read, admire the beauties of nature in all her surpassing loveliness, or skulk at one end, as you should do, and puff off a good Havanna. Next, the cabin has its attractions—good seats, tables, books, the newspapers of the day to amuse you. The ladies, they have a snug little cabin of their own, the curtains of which are similar in colour to those mentioned by the authoress of the last journal. They besides are favoured with a portion of the boat as a sitting parlour, neatly fitted up. No gentleman usually enters there, except those who may have ladies under their protection. The epicure will ask, how is the 'table,' and answers himself by saying rough enough. But to this I say emphatically, no such thing. The table is covered with as good fare, as a majority of the hotels of our city.

If any Philadelphians should, in a happy moment determine on journeying that way, but cannot make up his mind to dispense with lobsters, oysters, shad, rock, sheep head, &c., I will recommend him as a friend of his comfort and his exquisite stomach, to remain within the sound of Christ Church bells. But if he can put up with good beef, mountain mutton, veal, the fowls both

of earth and air, and the treasures of the limpid stream, he may have them in view together with abundance of vegetables, and as good pastry as he ought to eat. Then I advise him to leave for a brief period the bustle of a great city, and revel to satiety on the various natural objects of grandeur that will ever and anon strike on his astonished sight. Some of my friends on board, were as anxious to hear the tinkling of the dinner bell, as a holder on change would be to find his stock had advanced. Several have I observed peeping into the clean little place called the kitchen, reconnoitering the enemy they intend to attack. The cook is esteemed by all on board, after the first meal, as quite an *artiste*, and ranks as high in consequence of the piquant sauces he uses, called *mountain air* as did ever *Ude* among the good livers of Europe.

Another will say (a real confirmed dyspeptic,) oh, I care nothing about eating, it is what I want to avoid,—but how, in the name of all the sleepy Gods at once, do you manage to get your *natural rest*. Now this is a question not easily answered, because it is more than probable he has been accustomed to *unnatural rest*.—If so, he may depend on it, that he will be able to get his *natural rest*, and not a moment more; up he must get at dawn of day, ring goes the bell, down goes the passengers, and the cabin in a few minutes is itself again;—but to be more particular—the sleeping apparatus is ingeniously got up. There are three tiers of hammocks, or carcass recipients; the lower one is formed by turning over the seats around the cabin, the two above, are suspended like the Prophets' coffin, between heaven and earth, in one of which, if nature is really tired, you may find a restorer in “balmy sleep;” but if the contrary is the case, and sleep does not heavily weigh your eyelids down, you will twist and turn, grumble, &c. until

‘Tis midnight—yet not a nose  
Enhales the essence of repose.’

Then the boat will enter a lock—open go the sluices, and a roar ensues, that is only outroared by terrific Niagara.

To put this subject to rest, I will merely observe to those who have become effeminate from burying themselves in soothing pillows and beds that would rival the Cygnet's down in softness, that all that can be obtained in lieu of those luxuries, is the *disposition* that you will irresistibly feel to get your *natural rest*. But even regarding this as an inconvenience, it has *safely* to recommend it, that no other mode of travelling possesses; look at the almost daily notices of accidents in stages and steam boats. As a mode of overcoming the mountains, it is at once the most pleasant and safe. The invalid, if discreet, must prefer this mode, for fatigue is banished from the trip. The literati will join him in praising, where he is afforded a chance of pursuing his favorite studies. Even the *bon vivant* will be delighted, as he will have a well stocked bar ready to supply him with most of the favorite drinks that are in vogue at the present day. The temperance man can be furnished with iced lemonade, and the lover of the malt may see the white effervescence tip the red.

Passing through Lockport and Centreville, you arrive at Johnston in Cambria county 103 miles from Pittsburgh, you enter the largest canal basin in Pennsylvania, it is lined with warehouses for the reception of goods. Leaving Johnston, you ascend the stately Allegheny by inclined planes, and move through a Tunnel cut through a solid rock to the level; you then take a locomotive, and go over the 13 miles in less than an hour, and descend by inclined planes to the beautiful Town of Hollidaysburg, 38 miles from Johnston and 141 from Pittsburgh. Too much praise cannot be bestowed on those gentlemen who have charge of the Portage, every thing is ready, and the mountain, notwithstanding its formidable appearance, is easily passed. At Hollidaysburg you again take the Packets, passing

through the villages of Williamsburgh and “Waterstreet,” you enter the Canoe Valley, in sight of a mountain of the same name, you are now on one of the lovely glassy pools of the Juniata; no description can well convey an adequate idea of the singular beauty and wildness of this region. The “Vertical” or “Tower Rock” is now in sight, standing alone as the father of the Valley, surveying his proud estate. After getting a sight of Huntington, a large town 119 miles from Pittsburgh, you enter the flourishing county seat of Mifflin, called Lewistown; after leaving you get into the long Narrows, where many Union Canal boats were passing from the Hail Road to discharge their freights, brought from Philadelphia. The large quantities of decomposed rocks, on the mountains between Lewistown and Mifflin, will not fail to attract the eye of the traveller. When you come in sight of Columbia, a traveller from the West considers his journey over. Columbia is 351 miles from Pittsburgh, 82 from Philadelphia, by Hail Road, making the whole distance of the route 443 miles performed within four days. After viewing the scenery around Columbia from the Bridge which is worthy the attention of all who visit that place, I entered the car attached to their best Locomotive, and reached Philadelphia in six hours from Columbia; part of the distance was performed at the rate of 21 miles an hour.

C.

*Early and large Cucumbers.*—Many of our gardens in this place present a very flourishing appearance, considering the former backwardness of the season. Mr. Hardy, whose skill in gardening deserves commendation, already has cucumbers which measure 11 inches in length, eight inches in circumference, and weigh 14 lbs. together with cantelopes in a state of great forwardness.—*Miners' Jour.*

From the Commercial List.

#### COLUMBIA RAIL ROAD.

Amount of articles transported on the Columbia Rail Road, during the month of May, 1835.

#### ARRIVED.

Flour	bbls.	7,607
Grain	bushels,	3,610
Bacon	pounds,	586,802
Lard and Tallow	do.	45,411
Provisions not specified	do.	15,036
Feathers	do.	4,300
Wool	do.	2,564
Cotton	do.	4,950
Tobacco	do.	306,051
Leather	do.	57,053
Furs and Peltries	do.	63,724
Whiskey	gallons,	15,280
Merchandise	lbs.	53,232
Oil	gallons,	476
Furniture	pounds,	22,898
Window glass	boxes,	682
Rags	pounds,	20,239
Iron	do.	238,754
Lead	do.	2,000
Copper and tin	do.	2,491
Marble	do.	308,515
Lime	bushels,	4,452
Sawed lumber	feet,	205,787
Staves, heading and hoop poles	lbs.	59,260
Shingles,	number,	180,100
Sundries	pounds,	56,625

#### DEPARTED.

Fish	bbls.	298
Butter and cheese	lbs.	6,604
Salt	bushels	1,725
Provisions not specified	lbs.	70.

Wool	pounds	3,000
Cotton	do	26,659
Tobacco	do	22,399
Leather	do	8,793
Hides	do	33,555
Whiskey	gallons	1,053
Merchandise,	lbs.	1,309,157
Groceries	do	747,526
Oil	gallons	2,896
Drugs and dyestuffs	lbs.	50,710
Gypsum	tons	151
Furniture	pounds	72,454
Window glass	half boxes	155
Rags	pounds	40,445
Coal	tons	121
Iron	pounds	93,702
Lead	do	916
Copper and Tin	do	13,968
Marble	do	13,059
Bricks	number	18,196
Sawed lumber	feet	2,100
Sundries	pounds	111,422
Cars cleared	number	1,380

Tolls received, \$9,668 12.

DAVID W. WRAN, W. M.

#### AUCTION DUTIES.

! Paid during the last three months.

George Thomas,	\$7701 34
Wm. Folwell, Jr.,	4596 56
S. W. Lippincott,	3336 83
H. Copperthwait,	1819 42
Wm. Baker,	741 90
C. J. Wolbert,	691 03
T. W. L. Freeman,	123 20
S. Poulterer,	57 78
Geo. W. Smith,	34 86

We yesterday saw in front of our office a beautiful lot of bar iron, which was manufactured at Victoria Iron Works, Dauphin County, by Franklin E. Wright, & Co. from ore found near this place. The ore was taken from the mine and transported 16 miles above Harrisburg and returned here, in eight days time. In mentioning this fact, we wish also to state, that previous to the completion of the public works, there was no inducement to dig the ore in this township, of which there is an inexhaustible supply. Now, we understand, six furnaces are supplied with it, and not less than 50 tons are daily weighed in our sight. In this can be seen a striking benefit derived from internal improvements, and, as was remarked to us, an illustration of the fact, that "canals make their own work." The ore is of very superior quality, yielding about 65 per cent.—*Columbia Spy.*

From the Washington (Pa.) Reporter.

#### WOOL.

On Saturday a brisk business was done in the Wool line in this borough. Sixty cents per lb. are now offered for full blood, and a proportionate advance on inferior grades. We inspected a lot sold by Jesse Kenworthy, of East Bethlehem township, on Thursday last, for 62½ cents per lb. and agreed in the opinion expressed by all those who have examined it, that it is the best lot of Wool ever brought to our market. In quality it is about the same grade as our best fleeces; but the manner in which it has been handled and put up gives it all the whiteness and firmness of a bale of cotton. Wool growers do not sufficiently attend to this matter. Manufacturers are always willing to give from three to four cents more per pound, for wool well washed and banded.

dled. Mr. Kenworthy washes his sheep in the river; and notwithstanding the thorough washing given them, the fleeces averaged over three pounds.

#### WOOL.

The Washington (Pa.) Reporter says—"The wool crops of this county may be fairly estimated at 600,000 lbs. which at 55 cents, the average price paid this season, would bring into the county \$330,000."

From the Pittsburg Gazette.

#### PATENT SAFETY GUARD.

MR. CRAIG—I was much pleased to learn that Capt. Acheson, of the steamer George Collier, has embraced the opportunity afforded him of attaching to his engine our valuable citizen, Mr. Cadwallader Evans' "Patent Safety Guard against explosion of Steam Engine Boilers," which is without doubt, a valuable acquisition to his splendid vessel. It will relieve passengers accustomed to steam boat travelling from any apprehension of danger; and to those heretofore timid and alarmed about the dangers of steam, it will be a sure guarantee of safety, as the Safety Guard must act the instant the boilers get over their proper temperature, and give notice of danger in sufficient time to prevent explosion, without the least precipitation of the engineer.

Every commander of a steam boat should, without hesitation, imitate Captain Acheson's promptitude, and thus secure the perfect ease of their passengers; and to their boats a sure safe guard against such awful calamities as have occurred with engineers in whom every confidence has been placed. Several scientific gentlemen have witnessed the operation of the one in use at the P. S. Mill, and with certificates of some of the first engineers of Philadelphia, show the utility of the "Safety Guard."

Mr. Evans has devoted his whole life to the study of Steam, and has made several valuable improvements in the steam engine, and being raised under the eye and receiving instruction from his father, Oliver Evans, well known as the greatest of engineers, should therefore be most competent to do justice to such an invention. P.

#### THE POCAHONTAS, CAPT. WEST.

A friend has favoured us with the following extract of a letter from a gentleman of this city, who went to Liverpool in the Pocahontas:—"We left the Capes of Delaware on Wednesday, the 22d day of April, between twelve and one o'clock, noon, and were within thirty miles of Liverpool, waiting for a pilot, on Sunday, the tenth of May, and should have been ashore early in the day, but the said guide did not reach us till eleven at night,—thus a day was lost. Our voyage was made in eighteen days. We landed this morning, the eleventh, before breakfast, which makes but the nineteenth day.

Extract of a Letter, dated, Chicago, June 5, 1835

Dear Sir—I arrived here, early in May, in good health—and on the 2d of June received the remainder of the boxes and packages forwarded from New York on the 20th of April—a part of them having arrived on the 25th of May. This delay is owing, mainly, to the ice, which so long blockaded the port of Buffalo. Merchants here have not yet received all their goods—although those at Peoria, about one hundred miles from here, HAVE HAD THEIRS, BY THE WAY OF PHILADELPHIA, SIX WEEKS. When our canal to Peoria shall be completed, we shall be able to receive all our goods from Philadelphia through Pittsburgh, the Ohio and Illinois river and canal, earlier than by Lake Erie, unless there is some other channel than the New York canal.













